The OIL WEEKLY

A Journal for Oil and Gas Producers and Field Men

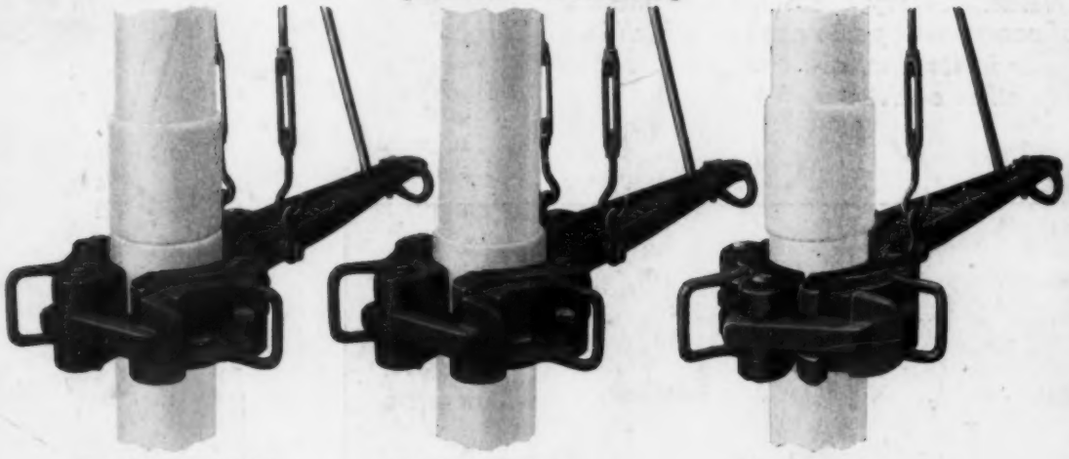
July 3, 1925 — 10 Cents A Copy

It's a Wilson

For heavy rotary service

Wilson Tongs have no equal

[DROP-FORGED]



On the Tool Joint — On the Coupling — On the Pipe

Now you can obtain tongs that will give heavy duty service and give far longer life. With Wilson drop-forged rotary tongs you can expect a higher standard of service and freedom from all tong troubles. Compactly built—easy to handle, and quick to latch. Perfect in their gripping power. Ask for folders.

Wilson & Willard Mfg. Co.

MANUFACTURERS

It's a Wilson

Distributed By WILSON OIL TOOLS CORPORATION

Sales Office:
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Tulsa, Okla.

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"OILWELL"

OIL BATH ROTARY SWIVEL

All working parts operate in a bath of oil, which eliminates the constant care of lubrication.

The swivel will not bind in operation.

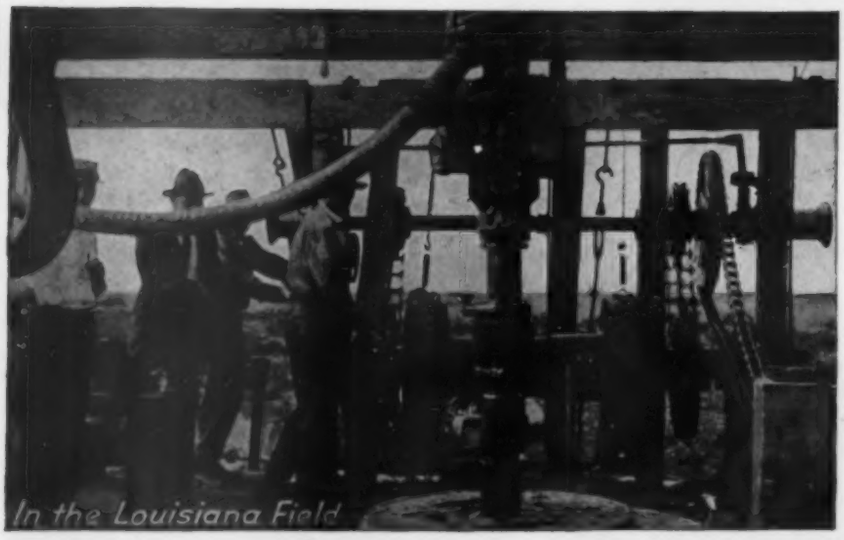
No sand, grit, or other substances can come in contact with the moving parts, as all working parts are completely enclosed. This insures long life to the parts.

All glands are packed and adjusted from the outside, without removing any part of the swivel. One "OILWELL" Oil Bath Swivel will do the work of two ordinary swivels, as you can use it continuously. There is no need for an extra swivel for emergencies.

"OILWELL" Oil Bath Rotary Swivels are described in detail in Bulletin No. 55—write for a copy or get one at any of our 100 Branches.

"OILWELL" Rotary Outfits, being made up of component parts each of which is a leader in its line, are vastly superior to any other outfits.

Imperial
Hose Clamp



In the Louisiana Field

"OILWELL"
Oil Bath
Rotary Swivel

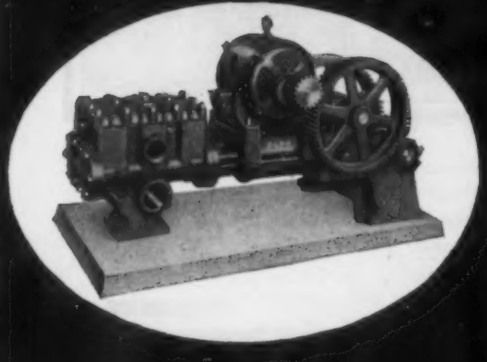
OIL WELL SUPPLY CO.

NEW YORK—LOS ANGELES—PITTSBURGH, U.S.A.—SAN FRANCISCO—TAMPICO—LONDON

WORLD'S OLDEST AND LARGEST MANUFACTURERS OF OIL FIELD EQUIPMENT

THE OIL WEEKLY. Issued weekly by the Gulf Publishing Co., 1716 Dallas Ave., Houston, Texas. Subscription price $1.00 per year; 10 cents per copy. Entered as second-class mail matter December 23, 1916, at the post office at Houston, Texas, under act of March 3, 1879.

HEADQUARTERS for Motorized Pumps



The growing trend toward electrification of pumping equipment is reflected in the constantly increasing demand for Gaso Motorized Pumps. The Midwest Refining Co., Manhattan Pipe Line Co., Humble Pipe Line Co., Mutual Oil Co., Shaffer Oil & Refining Co. and Pierce Petroleum Co. are a few of those we have recently served in this connection. Having made a thorough study of motor-driven pumps, we know the conditions that have to be met.

Write for prices and details of electrically operated pump equipment.

GASO PUMP & BURNER MFG. CO. • *Tulsa, Okla.*

GASO PUMPS

Say you saw it in The Oil Weekly

Good Luck

International "Ideco" Galvanized Steel Derricks solves the derrick problem, minimizing the danger of destruction by wind, fire or pull-ins.

INTERNATIONAL STEEL IDECO DERRICKS (GALVANIZED)

Say you saw it in The Oil Weekly

Divided By 3

With three old-fashioned wooden rigs grouped over a rich area of pay sand and the crews all racing for a bonus, your chances of escaping destruction by fire are divided by three! Nothing under the sun will save the other wells should one of them catch fire.

Eliminate Luck! Put International Derricks of Galvanized Structural Steel on those corner locations—put complete International Galvanized Steel Rigs to work under them and reduce that fire hazard to the irreducible minimum. Steel cannot burn—nor can you strike a spark from our Galvanized Structural Steel.

"Ideco" Steel Walking Beams are a permanent investment and will withstand the most severe service conditions.

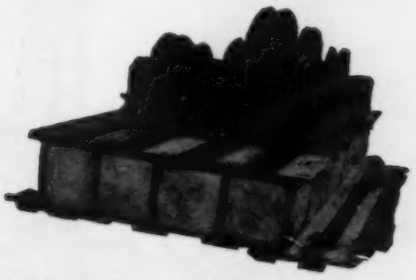
Permanent—Yet Portable Equipment

International All-Steel Rig Equipment also takes a lot of the guess out of drilling.

The most severe working conditions have proved to practical oil men that International "Ideco" Steel Walking Beams can and will deliver continuous, maximum service for an indefinite number of years.

Durability is not the only factor of our Crown Blocks. They have complete adjustability. In other words, any pulley—from one to seven—can be quickly adjusted to any position over the derrick. Protected lubrication, using any grade of lubricant from b. s. up.

"Ideco" Steel Bull, Band and Calf Wheels (painted or galvanized) give maximum service with the lowest upkeep and maintenance cost. Perfectly balanced. Stand up under the most severe drilling. Removable gudgeon permits quick repair of a worn trunnion.



"Ideco" Crown Blocks' one outstanding feature is ABSOLUTE ADJUSTABILITY.

Those who have seen the relics of worn out wheels scattered around the producing fields cannot fail to appreciate "Ideco."

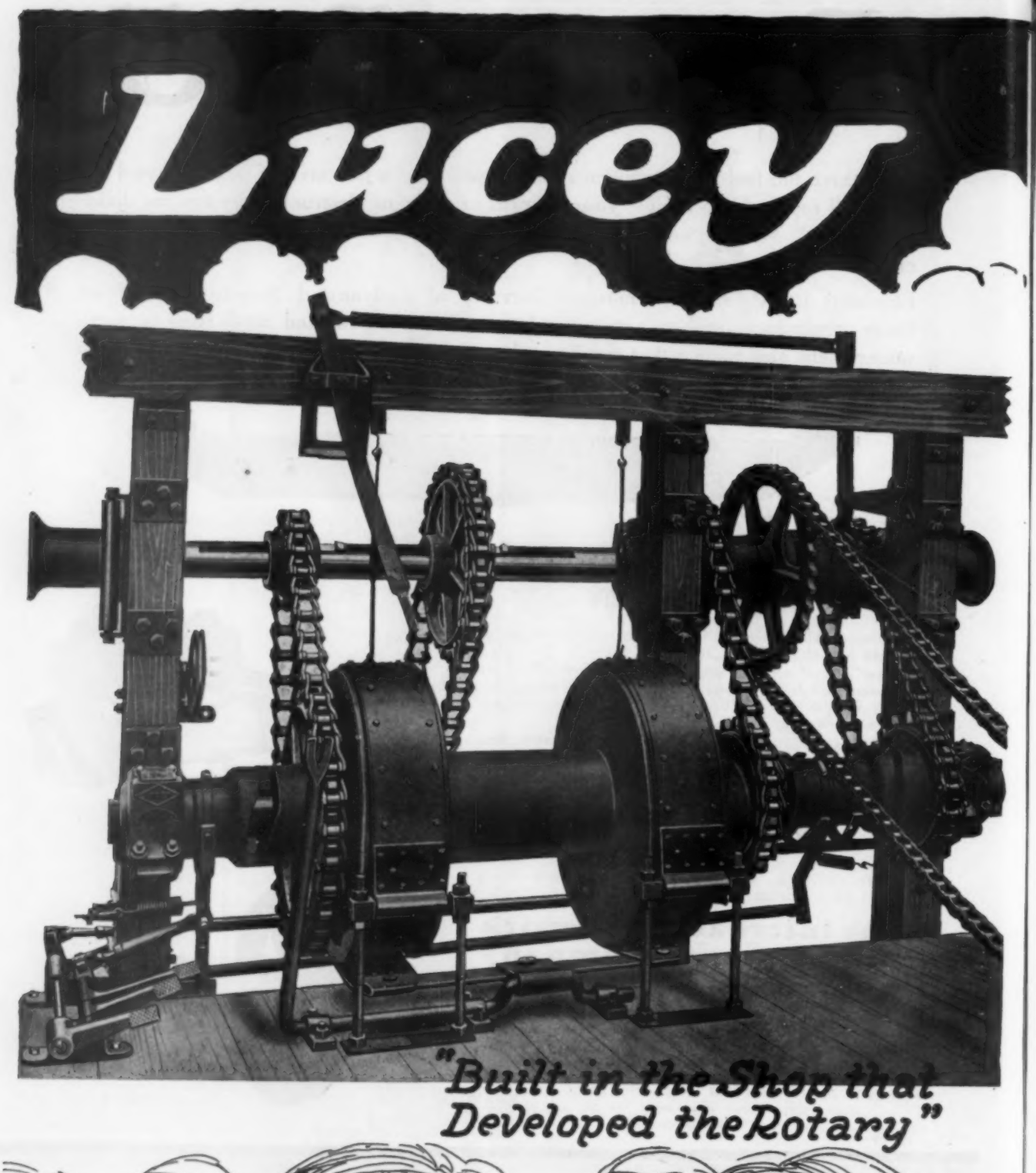
The International Derrick & Equipment Company

Columbus, Ohio **Los Angeles, Cal.**

Tulsa	Bakersfield	Wichita Falls
Shreveport	Taft	Corsicana
Houston	Oil City	Mexia
Casper	Smackover	New York
	El Dorado, Kansas	

The largest company devoted exclusively to the manufacture of steel (galvanized) equipment for the oil, gas and artesian industries

INTERNATIONAL STEEL IDECO DERRICKS (GALVANIZED)


Lucey
"Built in the Shop that Developed the Rotary"
Lucey Manufactu
Chattano

THREE SPEED DRAW WORKS for FAST and DEEP DRILLING

A new Rotary Drawworks "designed and built in the shops that developed the Rotary." You will immediately appreciate what these new improvements in design and construction will mean to you, and your Rotary Crews:

1. High, low and intermediate speeds.
2. Drum clutches operated by foot pedals. No two clutches can engage at the same time.
3. Clutches and sprockets are made of electric annealed steel.
4. Brake drums made of "Meehanite" metal,—metal of high tensile strength—slow to heat—will not cut the brake lining.
5. Wide brake bands—fitted with equalizer, simple and efficient.
6. Simple—speedy—safe to operate at all times.
7. Few parts—easy and quick to erect.

Ask any Lucey Representative for specifications, or write us for descriptive Bulletin.

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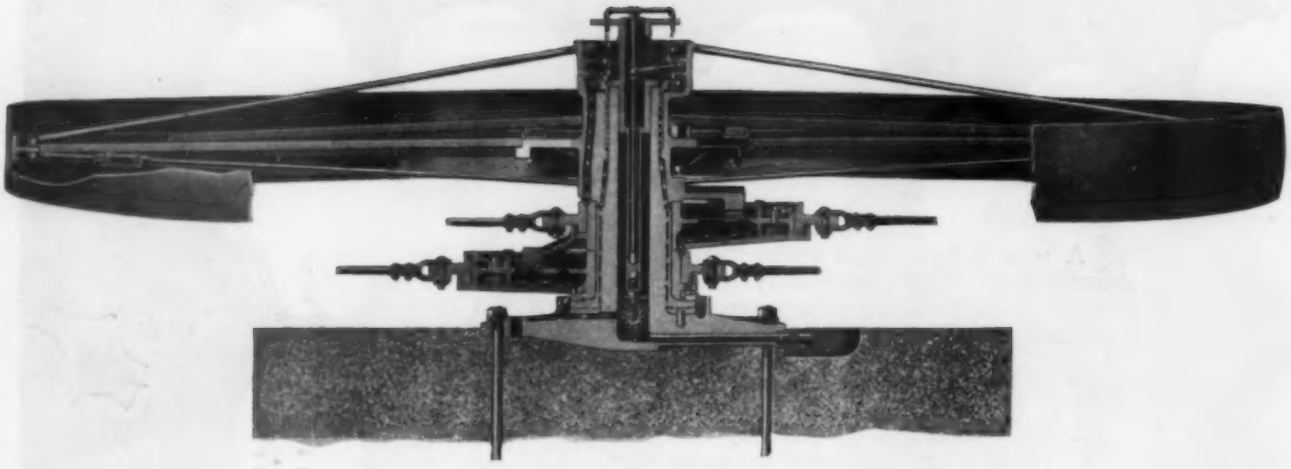
Wherever LUCEY there's Oil

...ring Corporation—
...ga, Tenn.

NATIONAL

No. 12C Pumping Power



THE PERFECTLY LUBRICATED POWER

Note the flow of oil indicated by arrows

THE NATIONAL SUPPLY COMPANIES

Say you saw it in The Oil Weekly

Take a Look at This List

of Reliable Manufacturers

Keystone Model 4 Crawler Gasoline Shovel manufactured by Keystone Driller Co., Beaver Falls, Pa. Equipped with Model TU 4-Cylinder Climax "Trustworthy" Engine.

—when you need Power Shovels or Cranes:

Bay City Dredge Works, Bay City, Mich.
Brown Hoisting Machinery Co., Cleveland, Ohio
Byers Machine Co., Ravenna, Ohio
Industrial Works, Bay City, Mich.
Keystone Driller Co., Beaver Falls, Pa.
Link-Belt Co., Chicago, Ill.
Locomotive Crane Co., of America, Champaign, Ill.
McMyler Interstate Co., Cleveland, Ohio
Northwest Engineering Co., Chicago, Ill.
Orton & Steinbrenner, Chicago, Ill.
Osgood Co., Marion, Ohio

—when you need Hoists:

Lidgerwood Mfg. Co., New York, N. Y.
J. S. Mundy Hoisting Engine Co., Newark, N. J.
National Hoisting Engine Co., Harrison, N. J.
O. K. Clutch & Machinery Co., Columbia, Pa.
Thomas Elevator Co., Chicago, Ill.

—when you need Gasoline Locomotives:

Davenport Locomotive Works, Davenport, Iowa.
Fate-Root-Heath Co., Plymouth, Ohio.
Mid-West Locomotive Works, Cincinnati, Ohio
Vulcan Iron Works, Wilkes Barre, Pa.
Geo. D. Whitcomb Co., Rochelle, Ill.

—when you need Ditchers:

Greiman Ditcher Co., Garner, Iowa
Parsons Co., Newton, Iowa

—when you need Paving Repairing Machines:

Equitable Asphalt Maintenance Co., Kansas City, Mo.

—when you need Tractors:

Four Drive Tractor Co., Big Rapids, Mich.
The Kenison Mfg., Co., Solomon, Kans.
The Russell Co., Massillon, Ohio
J. T. Tractor Co., Cleveland, Ohio
Wisconsin Farm Tractor Co., Sauk City, Wis.

—when you need Power Drilling Machines and Oil Drilling Machinery:

Harry Pennington, Houston, Texas
W. T. Young Engine Co., Oil City, Pa.

—when you need Air Compressor Units:

Mundie Manufacturing Co., Peru, Ill.
Rix Compressed Air & Drill Co., San Francisco, Cal.

Whitcomb 12-ton Gasoline Locomotive operated by Elmhurst - Chicago Stone Co. Equipped with Climax "Trustworthy" Engine.

You can depend upon the performance of any machine of the above makes, because they are all equipped with Climax—The "Trustworthy" Engine. ***Write for Catalog.***

CLIMAX ENGINEERING CO. 51 W. 18th Avenue Clinton, Iowa

Also Builders of Climax Refrigerating Units

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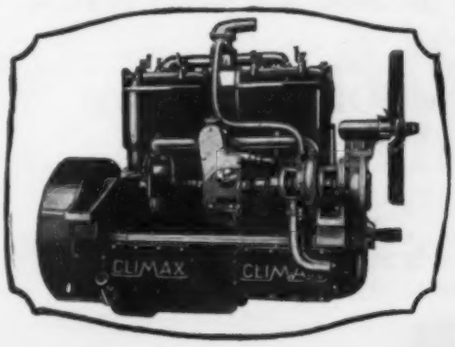
El Paso, Texas—Sheehan & Co., 1615 Bassett Avenue
Houston, Texas—F. W. Gartner Co., 2315 McKinney Avenue
Indianapolis, Ind.—Carl Dunning Supply Co., 328 Lemcke Bldg.
Louisville, Ky.—Brandies Machinery & Supply Co., 325 W. Main St.
Pittsburgh, Pa.—Beckwith Machinery Co., Cor. Front & Brown Sts.
Portland, Ore.—Coast Steel Machinery Co., 1 Porter St.
St. Louis, Mo.—Tuiley Equipment Co., 508-9 Title Guaranty Bldg.
San Francisco, Cal.—Edward R. Bacon Co., Inc., Folsom at 17th St.
Seattle, Wash.—Pacific Hoist & Derrick Co., 813 1st Ave. South



CLIMAX *Trade Mark Reg. U. S. Pat. Off.*

THE "TRUSTWORTHY" ENGINE

Say you saw it in The Oil Weekly

MOORE
TUBULAR STEEL
DERRICKS

Cave-in or Cratering of ground under derrick caused the foundation to sink, tipping derrick as shown. Norphlet, Smackover Field, Ark.

Defying Disaster on Hell's Half Acre

AFTER drilling into the deep sand at Norphlet, Smackover field, Arkansas, the flow of gas and water formed a crater under this derrick, which made the foundation sink into the ground, tipping the derrick over at a perilous angle. A similar fate overtook the same operators, on the same half acre of ground, after successfully drilling into the deep sand with a twin brother of this derrick. To the astonishment of the owners, who had witnessed other derricks under similar circumstances being reduced to worthless heaps of wreckage, these two Moore derricks stood the strain and were, with very little loss, salvaged for use elsewhere.

An army of over 300 Moore derricks are already in use in the Smackover field, and more are being added daily. Through every emergency in the spectacular new developments in this field, the Moore derricks have fully justified the confidence placed in them by their owners.

LEE C. MOORE & CO., Inc.
Pittsburgh, Pa.
Established 1907

CASPER, WYO. Midwest Building
DALLAS, TEXAS Magnolia Building
TULSA, OKLA. Atlas Life Building
SHREVEPORT, LA. 824 Prospect Avenue
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CALIFORNIA REPRESENTATIVES—BUCK & STODDARD
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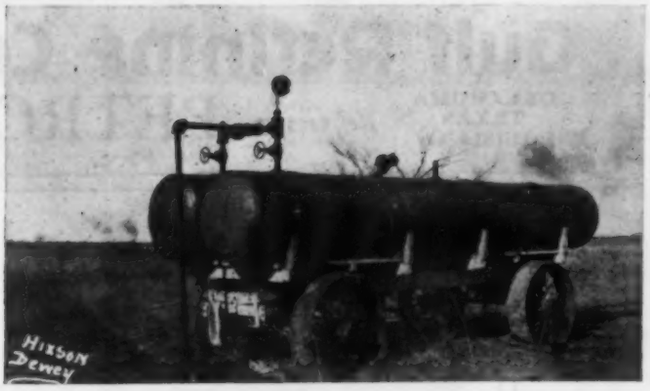
LOS ANGELES 3554 E. Slauson Avenue; Box 720 Arcade Station

Say you saw it in The Oil Weekly

AMERICAN TANK CO.
WHOLESALE RETAIL



American Welded Pressure Tanks working at 500 pounds air pressure:

Problems Studied in Making American Quality Tanks

(1) Quality of Steel to use in Bolted and Welded Tanks.

(2) Design and construction of Bolted Tanks.

(3) Practical and convenient tank fittings and appliances.

(4) Comparative strength of Welded, Riveted and Bolted Construction.

(5) When to use a Welded, a Riveted, a Bolted or a Wood tank.

(6) Effective means of preventing evaporation.

(6-a) Comparative effectiveness of Welded, Riveted, Bolted and Wood tanks in conservation of oil.

(6-b) Effect of pressure in tanks as means of conservation.

(6-c) Color of paint to use on tanks.

(7) Comparison of fire hazard with Welded, Riveted, Bolted and Wood tanks.

(8) Comparative cost of Welded, Riveted, Bolted and Wood tanks.

Our Engineers have assembled, in booklet form, data obtained from oil companies and other recognized authorities, answering in detail the above problems.

WE WILL SEND YOU A COPY FREE ON REQUEST

Problem No. 4

Comparative strength of welded, riveted and bolted construction.

Answer No. 4

American welded construction gives maximum strength for weight of steel used. (See pamphlet for detailed construction and proofs.)

TELL US YOUR NEEDS

AMERICAN TANK COMPANY

OKLAHOMA CITY AND TULSA

Service given in Oklahoma, Kansas, Arkansas, Texas, New Mexico, Colorado and Wyoming Oil Fields.

Gulf Refining Company

OKLAHOMA
TEXAS
LOUISIANA

Refiners of PETROLEUM

GASOLINE
REFINED OIL
NAPHTHA
GAS OILS
PARAFFINE WAX
ASPHALT
FUEL OIL
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CYLINDER
ENGINE
CORDAGE

Red and Pale Paraffine Oils

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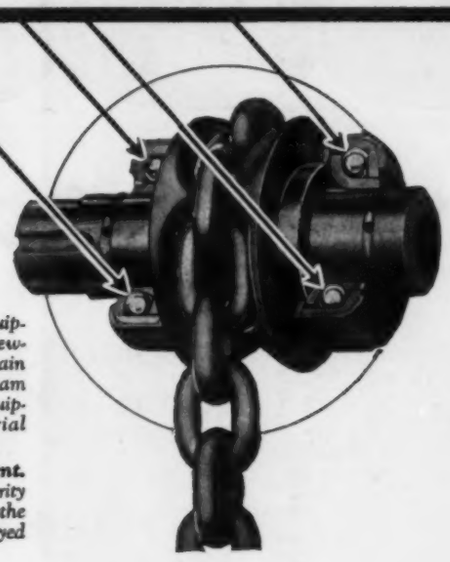
YALE

TRADE MARK



Yale Material Handling Equipment includes Spur-Geared, Screw-Geared and Differential Chain Blocks, Electric Hoists, I-Beam Trolleys, Overhead Crane Equipment and Electric Industrial Trucks, Tractors and Trailers.

Factory Locking Equipment. *To acquire locking control, security and convenience throughout the factory use Yale Master Keyed Locks.*

Strength and Efficiency

Each link of the Yale chain is die-formed, electrically welded on the side and heat-treated to give uniform strength. The chain is then gauged to insure accurate meshing with the load sheave pockets. This close meshing, with correct pocket design, reduces the friction and increases the smoothness of operation.

Yale is the only manufacturer of chain blocks making *all* the parts within its own plant. The continuous supervision and control serves to maintain absolute uniformity in quality of product.

For fifty-one years Yale has been the leader and has originated every notable improvement in chain block design.

Yale Ball Bearing Spur-Geared Blocks, with load sheave rotating on large chrome-vanadium steel ball bearings, represent the highest chain block efficiency yet developed.

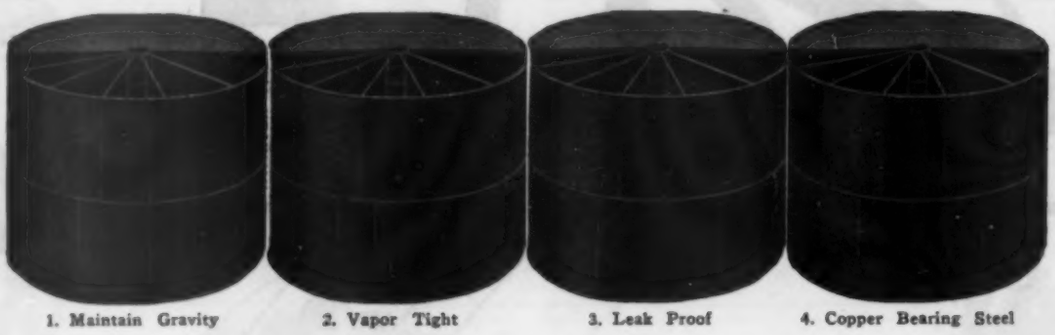
The Yale & Towne Manufacturing Co.

Stamford, Conn., U. S. A.

YALE MADE IS YALE MARKED

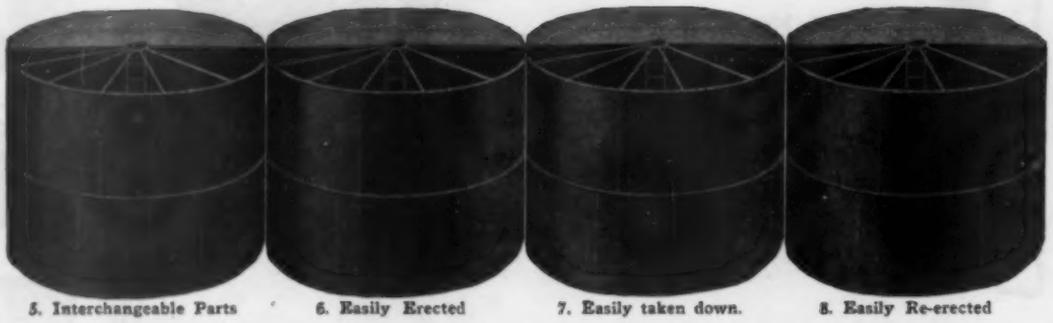
This illustration is made from an unretouched photograph of the Yale load chain.

YALE Hoisting and Conveying Systems



1. Maintain Gravity 2. Vapor Tight 3. Leak Proof 4. Copper Bearing Steel

Butler Bolted Tanks



5. Interchangeable Parts 6. Easily Erected 7. Easily taken down. 8. Easily Re-erected

Hold All the Oil!

Speedy Service!

Dealers, advantageously located, are:

M. & V. Tank Co., at Wichita Falls, Vernon and Olney, Texas.

Drane-Humphrey Co., at Fort Worth and Big Lake, Texas, and Carlsbad, New Mexico.

Drane Tank Co., at Tulsa and Holdenville, Oklahoma.

May Tank and Supply Company, at Casper and Salt Creek, Wyo.

M. A. Trimmer, at Blackwell, Oklahoma.

Wilson Tank and Culvert Company, at San Antonio, Texas.

Los Angeles Mfg. Company, Los Angeles, California.

G. J. Gillespie, 2, Whittington Avenue, E. C. 3, London, England.

You naturally ask, "How do Butler Bolted Tanks hold all the oil?"

It's the way they are made. Special multiple punching dies are used. With this specially designed efficient machinery all holes in each body sheet are accurately punched at one operation, and other holes—even those around outer edge of deck and bottom—are accurately punched.

Easy assembling is therefore assured.

Gravity is maintained.

Vapor is conserved.

Thus you save money by keeping your oil and by gravity maintenance.

By addressing one of our representatives or us, full particulars of precise construction and interesting prices will be given.

Other BUTLER Products

READY-MADE Steel Buildings, Bolted Tanks, Underground Tanks, Storage Tanks, Truck Tanks, Cans, Buckets, Funnels, Measuring Pumps, Etc.

Butler Manufacturing Co.

Kansas City, Mo. Minneapolis, Minn.

The Only Rock Bit
with

Sensitivity
Cutter Change

Over One Hundred Thousand Bags Cement in May

HALLIBURTON OIL WELL CEMENTING CO.
Duncan, Okla.

The DUNN Automatic Safety Spring HOOK

4 Sizes

No. 1—Weight 30 lbs., for sucker rods only.

No. 2—Weight 50 lbs. Capacity 45 tons. Light enough for a rod hook and heavy enough to handle any string of tubing.

No. 3—Weight 85 lbs. Capacity 75 tons, for users who prefer heavier equipment.

No. 4—Weight 130 lbs. Capacity over 125 tons.

Fig. 2

Fig. 6

Fig. 5

Fig. 3

Fig. 1

Fig. 4

Fig. 1 Shows hook in working position.

Fig. 2 Hook in open position ready to receive links. Weight of elevator automatically forces hook to closed, or locked working position.

Fig. 3 Holding sucker-rod elevator.

Fig. 4 Holding single-link tubing elevator.

Fig. 5 Holding double-link tubing elevator.

Fig. 6 Releasing links. When relieved of weight, hook automatically assumes open position shown in Fig. 2.

The Dunn Safety Hook handles in a new and entirely different way, in either direction for receiving or releasing elevator links. It automatically locks when in working position carrying a load and cannot be released except by operator. Sudden jars, jerks, dropping or rough usage cannot open it. The safety latch is completely protected from every outside influence. The relief spring surrounding shank is of sufficient strength to lift a section of tubing and thereby eliminates any possibility of burring the threads when unscrewing, as well as greatly simplifying this operation and handling.

Write for descriptive folders

Dunn Mfg. Co.
Oxnard, California

Are You Interested in Reducing Expense of Drilling Oil Wells?

Then why continue with obsolete machinery when everybody who has used

The Standard Collapsible Rotary Drill and Core Barrel

emphatically state that they have lessened their expenses from 25 to 40 per cent and also had the satisfaction of procuring a perfect core every few feet without appreciable loss of time?

These statements can be verified by consulting any of the several parties now using The Standard Collapsible Rotary Drill and Core Barrel.

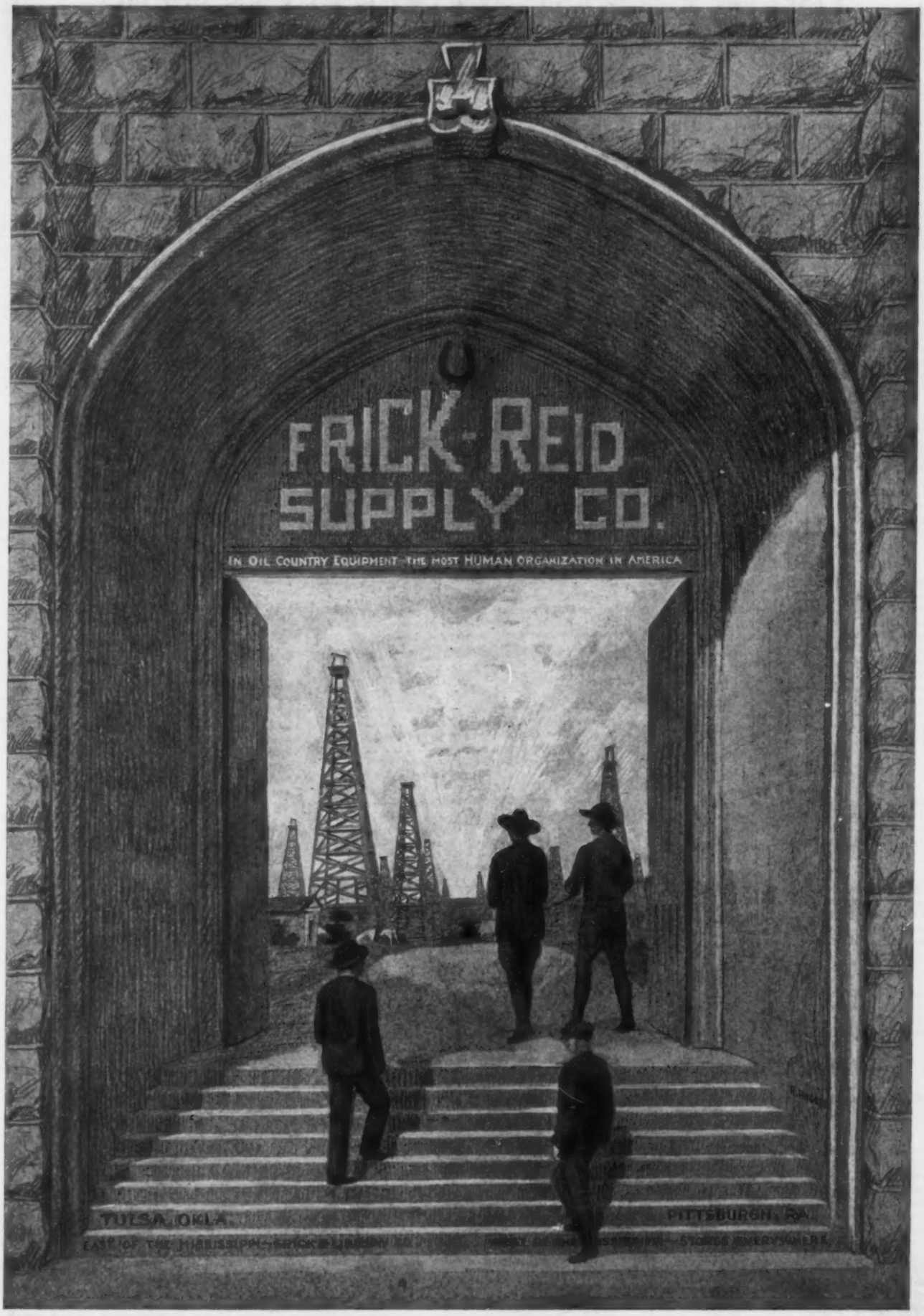
Write for Literature

Manufactured by

O. M. CARTER

W. T. HILTPOLD, *Sales Agent*

206-7-8 Scanlan Building • HOUSTON, TEXAS



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Wildcatting in the Interior of Mexico

The OIL WEEKLY

July 3, 1925 Volume 38, Number 2

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Fire in the La Rosa Field, Venezuela, which started when the R-28 Well of Venezuelan Oil Concession blew in making around 50,000 barrels.

Photo—Courtesy Wm. H. Eaton

Downward Trend of Light Oil Output Unchanged in June

Oklahoma and West Texas have fields in prospect but Drilling will be slow and expensive

UNTIL some of the fields now in prospect reach a higher stage of development, light oil production in the Mid-Continent area should continue to decline. Both Oklahoma and North Texas registered substantial losses in June, compared with May.

Oklahoma has prospective development to offset this loss in the future. Nothing in North Texas promises to bring production lack suddenly. But the Big Lake area has potential production to offset the drop in the older fields of the Texas part of the Mid-Continent district.

In both Oklahoma and Texas the drilling of the promised fields is an expensive venture, Oklahoma offering deep drilling, while in West Texas the remoteness of the fields is against rapid development.

The deep sand at Garber should furnish more production in Oklahoma by the end of July, while the Thomas area may add more wells late in that month or in August. Garber has had a deep well for several months, producing from the Wilcox sand. The Marland company uncovered Wilcox production in the Thomas district more recently.

West Texas Up

The still deeper and unidentified producing sand in the well of the K-D Oil Company in Noble County is a possibility about which too little is known for making predictions.

In the case of the Big Lake field, its production passed 900,000 barrels in June. That it will reach 1,000,000 for July seems certain. For the coming months, its output should rise steadily until it becomes one of the major light oil fields of the country.

Unless the executives of some of the major oil producing companies have guessed wrong, more West Texas oil is due from the strike in Crockett County. Upwards of $5,000,000 have been spent for producing properties, leases and royalties and the district is looked on as another certain oil field.

The trend at Smackover depends on the Blossom sand. Should this formation prove a prolific producer of oil, no end is in sight for the flood of oil that Arkansas has been furnishing the world of commerce. Arkansas production for June was 11,894,760 barrels, Smackover furnished 11,547,630 barrels of this.

Arkansas, however, showed a drop in production for June against May, when the total was 12,674,609 barrels.

In fact production for the United States went off almost 4,000,000 barrels in comparing these two months, May having 59,591,273 barrels and June 65,946,920 barrels. The latter month has one day less than its predecessor but this does not account for the drop.

Field development also showed a drop for June, there being fewer wells completed and a smaller initial production of wells.

Light Oil Off

The decline in Oklahoma production for June is due to the decrease in the recovery of high gravity crude in the Tonkawa area coupled with the natural decline in the older fields of the state. During the month operators recovered 13,185,040 barrels of oil compared with 13,913,456 barrels for the previous month. May had a one day advantage over June. This however, does not account for the loss of more than 450,000 barrels of the total decrease. Figuring upon the one day advantage basis, the total for June was some 300,000 barrels below the total for May for the first 30 days of each month.

The Tonkawa field again led all others in the recovery of oil for the month with 1,800,450 barrels while Burbank was again second with 1,747,110 barrels. The Gilcrease-Papoose area dropped from sixth to eighth place when it was given a total for only 476,970 barrels for June compared to a total of 769,079 barrels for the previous month.

There were 456 wells completed during June. Of this total 279 were oil wells, 34 were gas wells and 145 were dry holes. The initial production from the 279 producers was 73,456 barrels with Seminole County being the chief contributor with 24,519 barrels.

The outstanding incident of June in Oklahoma was the uncovering of an oil sand at 5107 feet in a formation heretofore not outlined by geological information. The K-D Oil Company well in Noble County is the well which will be the deepest producer of the Mid-Continent area when completed. The month of July should see the completion of some wells in the deep sand at Garber and the Thomas pool and the production

JUNE U. S. PRODUCTION

Following is the gross estimated production of crude oil in the United States for the month of June as compiled by The OIL WEEKLY:

California	18,982,500
Mountain States	2,688,630
Eastern States	3,095,250
Texas	13,147,280
Oklahoma	13,185,040
Kansas	1,118,660
Arkansas	11,894,760
Louisiana	1,834,800
Totals	65,946,920
May	69,591,273

PAST TWELVE MONTHS

The record for the past twelve months is an interesting study for comparison purposes, the following table giving field statistics for all states in the Union. Figures for Southern California begin in June, 1924, and those for Mountain States begin in November.

Month—	Completions	Producers	Gas wells	Failures	Initial Prod.
June, 1924	1 808	1,215	193	400	182,750
July	1,637	1,087	168	382	208,875
August	2,041	1,405	196	440	316,713
September	1,503	1,029	152	322	2[illegible],716
October	1,788	1,149	221	418	255,320
November	1,436	888	205	343	203,135
December	1 624	979	269	376	257,745
January, 1925	1,704	1,028	262	414	522,901
February	1827	1,011	190	426	247,886
March	1,637	1,053	189	395	242,718
April	1,972	1,284	183	505	460,063
May	2,639	1,777	218	644	763,802
June	2,323	1,583	177	563	669,048

for that month will obviously outpoint June.

Kansas Output Up

The phenomenal increase in the production of Kansas for June is credited to the Rainbow Bend field of Cowley County. Entering the month with a production of approximately 9000 barrels as a daily average the field produced as high as 21,000 barrels per day before the month had ended.

The total production for the state for June was 1,118,660 barrels. The outstanding feature of this rise was that the total production of the state passed the hundred thousand barrel mark for the daily average.

The Greenwood County fields led all others as usual with a total of 848,310 barrels for the month. The Rainbow Bend field was second with a total of 621,150 barrels.

There were 188 wells completed during the month. Of this total 110 were producing wells, six were gas wells and 72 were dry holes. The 110 producing wells had an initial output of 28,620 barrels. The 25 producing wells completed in Cowley County show an initial production of 16,604 barrels.

North Texas

Fewer completions were reported from the North and Central Texas fields during June, and a sharp decline in production of several of the major oil producing areas caused the district as a whole to fall below the high mark established during the previous month. Production gains by Reagan, Wilbarger and Stephens Counties were more than offset by losses sustained by Archer, Wortham, Corsicana-Powell and Young County. The combined initial flow of wells completed during June did not measure up to the average maintained since the starting of active drilling campaigns earlier in the year, and none of the individual fields are experiencing an unusual volume of drilling activity for this season of the year, although Archer County still retains its leadership in field work.

The Big Lake field in Reagan County added 11,855 barrels of new production from five wells completed in June, and produced slightly more than 900,000 barrels of high gravity crude during the 30-day period. This production is owned and controlled by two independent companies, and has registered a consistant gain for the past year or more, with prospects of passing the million barrel mark in July. The discovery of a new oil field to the south of this field in Crockett County early in June created more than usual attention, owing to the performance of the Big Lake field to date, and more than $5,000,000 has been spent in cash and oil considerations by major companies and independent for lease and royalty protection around the wildcat producer, which is yet to be completed.

The upward swing of production in Stephens County during June was made possible by completion of wells in the new Barney Carter field with a high initial flow. This field gave promise of doubling the output of the county before the close of the summer, until dry holes were made late in June to the southeast and southwest of production. This field climbed to a daily average of 11,000 barrels from five wells June 10, but dropped to less than 4000 barrels daily before the close of the month with two additional producers, thereby indicating that the flush is comparatively short lived.

Archer County continues to lead in new completions each month, although the totals for June were 30 fewer than those reported for the month of May. Archer County's new wells have been lacking in large flush yield, and production declined to 1,138,425 barrels in June. Young County also declined in production during June after establishing a peak mark on the previous month. This decline is due to the passing of the flush period in the Gambrell and Carpenter-Litchfield shallow fields in the upper part of the county, but new field work is being started in the deep pay area.

In the lower half of the county, while several new shallow pools are in the making. Electra, Burkburnett and K-M-A-Iowa Park fields in Wichita County experienced very little change during June as compared to the previous month, and a large number of old pumpers are being worked over to gain the maximum production during present favorable crude prices.

The South Vernon field in Wilbarger County gained in monthly output in June, and several new oil pools were opened up to the southeast and east of present production, thereby indicating that a series of small oil producing areas exist between the South Vernon and Electra fields. The 2300-foot sand pay, which is the deepest oil producing horizon in the South Vernon field, is being proven over a larger area each month, and is furnishing the most consistent producers.

New Pools

Montague County's possibilities of becoming an important oil producing area in the North Texas district were materially boosted late in June when the Humphreys Corporation's wildcat on the west edge of the Nocona heavy oil field uncovered a high gravity oil sand at the 1800-foot level. This test flowed by heads when first drilled in, and is the deepest producer in the county.

The Panhandle district of Texas is experiencing a steady development program in Carson, Hutchinson and Wheeler Counties, and minor extensions to the oil producing area were made during June in the latter two counties. Gray County, which has one oil producer making about 50 barrels daily, added its second well last month when C. H. Clark and others completed a 15-barrel pumper at 2932 feet.

A new oil producing area for the East Central Texas fault region was opened in June when Barkley & Meadows' Hilburn 1 came in flowing 225 barrels 44.4 gravity oil from regular Woodbine sand at 2996 feet. This new pool shortens the interval between the old Richland and Currie fields in Navarro County, but will be very small in area, owing to the proximity of dry holes and the establishment of the west line of the possible producing area by a row of gas wells. The Wortham and Corsicana-Powell fields reported sharp drops in crude recovery during June, due to natural decline of old wells. The development of small pumpers from shallow sands is partially offsetting the production loss.

Tables giving complete statistics for all U. S. Fields for the month of June will be found on page 36.

UNITED STATES FIELD STATISTICS

Following are the completions, showing producers, gas wells, failures and initial production of crude by states for the month of June as compiled by The OIL WEEKLY:

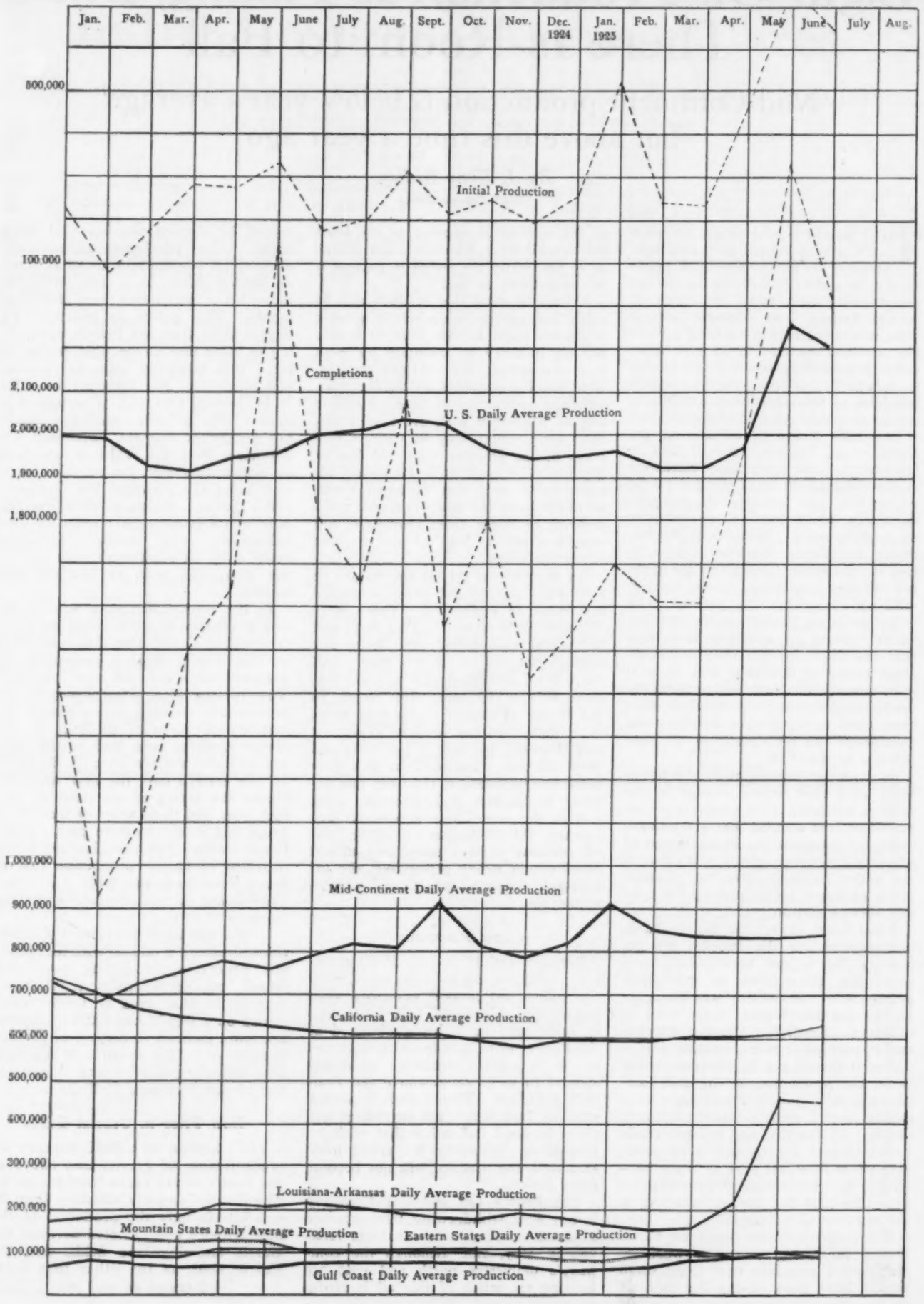
California	111	110	..	1	85,050
Oklahoma	458	279	34	145	73,456
Kansas	188	110	6	72	28,620
Kentucky	164	111	11	42	1,625
Mississippi	..	..	..	..	....
Mountain States	90	79	1	10	11,416
New York	20	20	..	..	92
Ohio	188	128	30	30	2,228
Pennsylvania	180	145	22	13	695
Tennessee	9	4	1	4	850
W. Virginia	122	46	62	14	521
Louisiana	40	21	4	15	5,741
Illinois	27	15	1	11	347
Indiana	..	..	..	..	....
Arkansas	248	217	3	28	376,326
Texas	478	298	2	178	82,081
Totals	2,323	1,583	177	563	669,048

Italy Will Admit Oil Field Machinery Duty Free

Washington, D. C.—Machines and parts, as well as metallic materials, imported into Italy for use in petroleum oil prospecting and in the exploitation of petroleum reserves will be admitted free of duty for a period of ten years, under the terms of a royal decree just issued, according to a report received at the Department of Commerce from Assistant Trade Commissioner A. A. Osborne, Rome. The decree, however, is applicable only to research for petroleum and its extraction, and there is no exemption granted machinery or apparatus to be used in the extraction of bituminous shale oil or any mineral oil other than petroleum.

The ministries of national economy and finance are given the power to issue decisions from which there shall be no appeal, regarding the classification of machinery or material for the purpose of entering duty free under the new law.

U. S. PRODUCTION AND FIELD STATISTICS



Light Oil Production Is Falling, But—There Is Room to Fall

Mid-Continent production is below year's average but above this time a year ago

By J. Kent Ridley,
Staff Representative

THE refined market is not so cocky as it was a couple of weeks ago. Refiners are able to hold their prices because of orders booked for future delivery rather than from any force of current demand from domestic jobbers. The latter apparently are playing a waiting game and are much in the dark about what the immediate future holds, hoping as much for a recession in refined schedules as some producers are hoping for an increase in crude prices. Failure of the tank wagon to advance in the Standard of Indiana territory and in Ohio has left the independent marketers in those states with small margins except where they are protected by marginal contracts, which are not so common as in other years. Nicholas of the National Petroleum Marketers Association is continually cautioning his members against speculation in the market, advising them that the present price at refineries is as high as is justified. So the jobbers are consoling themselves that the small margin they are operating under at this time will at least keep down public criticism of them for profiteering and at the same time eliminate some of the weaker members and discourage the multiplication of competition in that field.

As a further bearing upon the possibility of a tank wagon change in the Indiana territory, it is persistently rumored in that section that a dominant marketer proposes the inauguration of quantity discounts which will effect a cut rather than a raise on gasoline going to larger users, both tank wagon and service station.

Great store is set on the probable consumption for the two-day Fourth holiday, but it can hardly be anticipated that the refilling of marketers' storage after the holiday will strengthen the gasoline market more than to firmness. Favorable weather for the two important days is a contingency.

And it should not be overlooked that while the production of the Mid-Continent is falling quite consistently, it is falling from a peak established during the last 12 months, and present crude production is approximately as much above this time last year as is accounted for by the increased consumption occasioned by the normal increase in the number of automobiles.

The increase of ten cents per barrel posted for Smackover will work to eliminate a premium that some small buyers have been paying for this oil, as the new price appears as the limit for this oil when transportation charges to tide-water are added in getting it in competition as fuel.

A state of mind that is close akin to being pessimistically optimistic is what is needed right at this time to enable the oil industry to maintain an even keel throughout the summer months. This belief is sustained by the fact that, although production of light oil still is low as compared with previous years, field work under way in various sections of the country from the Rocky Mountains eastward is mounting almost daily, and that in some areas, particularly in the Mid-Continent, withdrawals of crude from storage is not now at a rate as high as was the case thirty days ago.

An instance of this is the record of new wells started and wells completed last week in Oklahoma. There were 115 new wells started in that state and 127 wells completed, this being the highest attained so far this year. And there is no indication now in sight that there will be any appreciable let-up. In the Rocky Mountain States field work is at high tide, not only in Wyoming and Montana, but also in Colorado and New Mexico. Included in this new work in Oklahoma is the deep pay activity in Garber, in Holdenville area, and in the new Thomas pool in Kay County. All of this area is in the light oil sections of that state, and should development prove productive, the increase in light oil production will be noticeable.

Few Premiums

Refinery activity in the Mid-Continent continues on an even scale, with the refined oil market generally slow but steady. Crude oil held in storage in some sections is being obtained at the market price, and in some instances at a reported premium, generally around 10 to 15 cents above the Prairie's schedule. This premium paying practice, however, is not spreading, and there is good indication that with no immediate change in the crude price structure, the practice will not become more general.

The Prairie Oil and Gas Company is not now withdrawing from storage as much crude as was run from tankage in May, and, although the company's deliveries north and east are holding up, much of this oil is represented by current purchases of fresh crude. Other purchasing agencies are drawing on storage now about as much as during May, in a few instances more being withdrawn now than last month. This policy as practiced by buyers other than the Prairie is resulting in more new connections being offered that company than heretofore, and officials of the company have let it be known that this is imposing a burden that present conditions might not altogether warrant. Standard Oil purchases from the Prairie are holding up well at this time, the notable exception being the Standard Oil Company (New Jersey), which is obtaining the bulk of its crude supply from its own subsidiaries and through contracts made with Mid-Continent and California companies such as Marland and others.

In the Rocky Mountain section the new development work going on there is resulting in the pipe line companies in that region making extensions to properly take care of new business. The Illinois Pipe Line Company in Montana is engaged in increasing the capacity of some of its lines in the Kevin-Sunburst area, both in the eastern and the western part of the field. In the eastern part the new work includes the laying of six miles of six-inch pipe, and three miles of six-inch is being laid in the western part. Additional storage facilities also are being provided to handle production that is being developed, the Ohio Oil Company being particularly active in this work.

In the Appalachian region the crude price structure is sound, with independent buyers again paying premiums where conditions warrant. Refinery activity in that area is being maintained on a steady basis and producers are more inclined to dispose of current production. This situation is relieving pipe line companies' worry in providing adequate storage facilities.

New Price in Central Texas

The adoption of a $2.25 price on all crude testing 42 gravity and above in the East Central Texas fault region by The Texas Company, effective June 26, can benefit only the producers in the new Hilburn pool, located between the Currie and Richland fields, and the Currie field, as the other four fields

(Continued on page 49.)

Oil and Gas Possibilities in the Trinity In the Louisiana-Arkansas Area

Data available from exploration over wide territory applied to potentialities of deeper drilling

By H. D. Easton

THE data pertaining to the Trinity formation and its oil and gas possibilities are widely scattered among various reports on gravel deposits, asphalt deposits, diamond mining, geological folios, well logs, etc. It now seems desirable to assemble something of this scattered information and give it a usable presentation. The time has come when there will be considerable drilling below the Woodbine, and the work of exploring unknown and deeper regions needs have a starting point from which to build an accessible reference.

While it is true that prospecting in the usual pay horizons of the Upper Cretaceous (Nacatoch sand, Chalk Rock, Blossom sand, and Woodbine formation) has only commenced in a manner that can assure success, and there still remain expectations of finding numerous other shallow fields therein, yet this shallower prospecting on wildcat structures will always be fraught with financial hazard and uncertainty. Much pioneer work should now be done deeper down, using heavy rotary outfits and cable tools.

Proven Structures Should Be Drilled Deeper

There are many oil and gas fields in Northern Louisiana and Southern Arkansas producing from the Woodbine or shallower. Possibilities of finding pays of light oil or rich gas in the Trinity formation are now so bright that these definite structures in the Upper Cretaceous measures, proven in the most positive manner by production, warrant prospecting wherever there is a reasonable expectation that a drilling depth of 5000 feet, or less, will reach the Trinity.

This statement applies to proven structures only: if a wildcat structure fails to find production in the Woodbine, or shallower, it should not be drilled deeper. In some places the Woodbine, itself, lies below reasonable drilling depth. Even the Nacatoch cannot be considered south of the Angelina-Caldwell Flexure—for example, the Urania showings of heavy oil are found near the base of the Claiborne, and the Nacatoch lies too deep to be of economic interest. Urania is quite some distance south of the Flexure where it is necessary to go below 1500 feet to reach the lower part of the Claiborne. Following this there would come a full 2000 feet of Wilcox, making 3500 feet to reach the Midway. The Midway and the Arkadelphia would have a combined thickness of some 800 feet—a study of the Arkadelphia by Dr. H. V. Howe[1] over Arkansas and Louisiana, shows it to have a rather uniform thickness of about 600 feet. This would place the Nacatoch, at Urania, some 4300 feet deep; but the Nacatoch thins and disappears in going southward, so it is very probable that there would be no Nacatoch present even at that great depth. In such areas drilling should be limited to a search for trapping structures that might give a field of heavy oil at the base of the Claiborne.

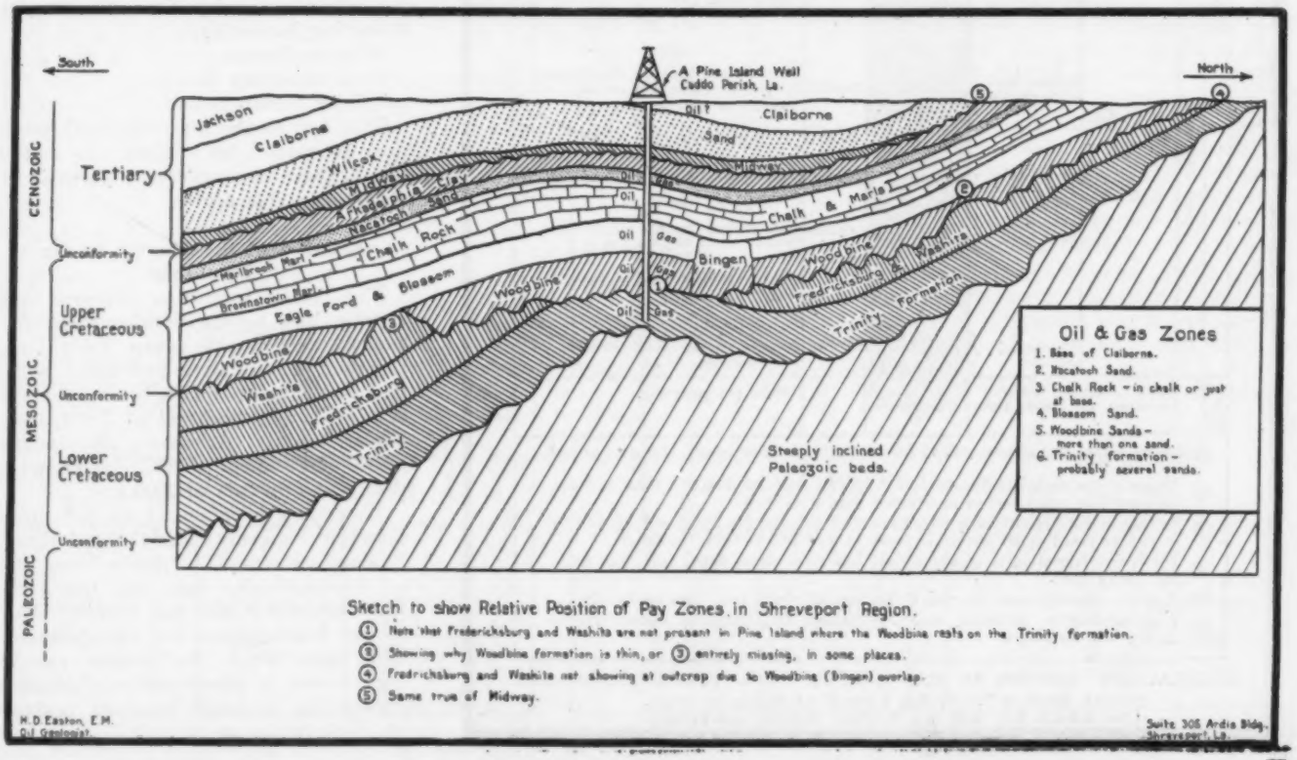
On the other hand, there are numerous areas where the Trinity should be prospected. The big gas wells, extremely rich in gasoline content, discovered in Pine Island by the Dixie and the Fortuna Oil Companies, have demonstrated that the upper portion of the Trinity is productive within a drilling depth of less than 3700 feet. Still deeper drilling will find other Trinity sands and additional pays of rich gas and unusually light oil.

Position of Trinity Formation in Geological Column

The U. S. Geological Survey's time classification of the stratified or sedimentary rocks[2] gives four great eras

[1] Louisiana State University Bulletin, Vol. XVI-na., No. 5, Pts. 1 and 2.

[2] U. S. G. S., Bulletin 769.



or ages. Beginning with the youngest and reading downward, these are as follows: (See sketch map)

Era and Meaning	Maximum Thickness Feet
Cenozoic (Recent Life)	70,300
Mesozoic (Middle Life)	74,900
Paleozoic (Old Life)	161,500
Proterozoic (First Life).....	240,000?

Modern estimates of the time that has elapsed since the first life appeared on the earth run as high as 1,710,000,000 years, which includes the time required to lay down all these beds and also the vast periods of time represented by the unconformities—lapses between periods of deposition.

In the Shreveport region we are concerned only with the upper portion of the Mesozoic and the lower portion of the Cenozoic, the latter includes the Tertiary system with its Eocene series which follow:

Claiborne
Wilcox
Midway.

Over much of this region, the Claiborne is either missing or is found only as a thin mantle. The Midway is not easily recognized in drilling, being so similar to the underlying Arkadelphia shale that the two are usually lumped together as a single unit. This leaves the Wilcox (sands, boulders and lignite beds and clays) as the principal formation of the Cenozoic to be considered.

We are producing no oil or gas from the Cenozoic in this neighborhood except in the shallow Nacogdoches field in Nacogdoches and Angelina Counties, Texas. Oil and gas seeps, and showings from shallow depths are found all the way along the Angelina-Caldwell Flexure from the shallow field just mentioned to the showings reported at Urania. Shallow fields might be found on any good closed structure anywhere along this entire line. Likewise, shallow showings from sands near the base of the Claiborne have been found in southern Arkansas where, too, shallow fields might be found.

However, with the single exception noted above, all the oil and gas of the Shreveport region is coming from the Mesozoic which has three systems, as follows:

Cretaceous (upper and lower)
Jurassic
Triassic.

Both the Jurassic and the Triassic are wholly missing in this region, thus leaving only the Upper, and the Lower Cretaceous to be discussed. We are most familiar with the Upper Cretaceous which carries the well-known pay horizons among the following formations:

Arkadelphia Clay
Nacatoch Sand
Marlbrook Marl
Annona Chalk
Brownstown Marl
Blossom Sand (Bingen formation)
Eagle Ford Shale (Bingen formation)
Woodbine Sands (Bingen formation).

The sands and chalk of this series constitute our pay zones, developed over a wide area, but it is not the design of this article to discuss them.

So far, we have followed the drilling bit downward through the geological column to the base of the Upper Cretaceous, but now we come to the point of seeing what lies below the Woodbine in a portion of the column but little explored, namely, the Lower Cretaceous (Comanche Series) with its following formations:

Washita Group
Fredericksburg Group
Trinity Group

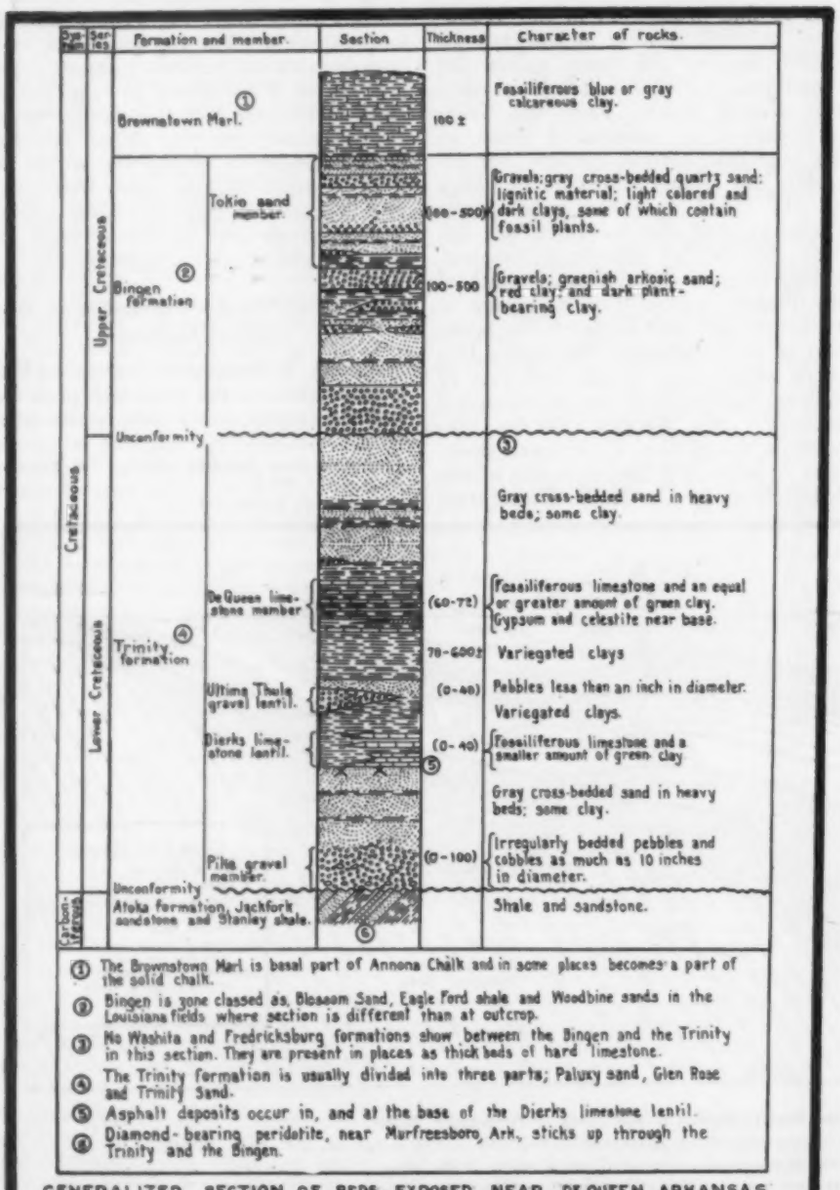
This brings the bit entirely through the Mesozoic beds since, as noted above, there was never any Jurassic or Triassic in this region.

Relation of the Trinity to the Paleozoic

The Trinity formation outcrops in a narrow belt across Southwestern Arkansas and Southeastern Oklahoma, this belt being but a few miles wide. One of the most conspicuous exposures is in the neighborhood of De Queen, Sevier County, Arkansas, almost due north of Shreveport, where it shows a thickness upwards of 2000 feet.

There is a pronounced unconformity between the Trinity and the underlying Paleozoic rocks. The Atoka formation of Pennsylvanian age, and the Jackfork sandstone and the Stanley shale of the Mississippian are the Paleozoic beds upon which the Trinity rests at its contact in southwestern Arkansas except for a small area of igneous

(Continued on page 66.)


System
Series
Formation and member.
Section
Thickness
Character of rocks.
Cretaceous
Upper Cretaceous
Lower Cretaceous
Brownstown Marl. ①
100 ±
Fossiliferous blue or gray calcareous clay.
Tokio sand member.
Bingen formation ②
100-500±
100-500
Gravels; gray cross-bedded quartz sand; lignitic material; light colored and dark clays, some of which contain fossil plants.
Gravels; greenish arkosic sand; red clay; and dark plant-bearing clay.
Unconformity
⑤
Gray cross-bedded sand in heavy beds; some clay.
De Queen limestone member
Trinity formation ④
(60-72)
70-600±
Fossiliferous limestone and an equal or greater amount of green clay. Gypsum and celestite near base.
Variegated clays
Ultima Thule gravel lentil.
(0-40)
Pebbles less than an inch in diameter.
Variegated clays.
Dierks limestone lentil.
(0-40)
⑤
Fossiliferous limestone and a smaller amount of green clay
Gray cross-bedded sand in heavy beds; some clay.
Pike gravel member.
(0-100)
Irregularly bedded pebbles and cobbles as much as 10 inches in diameter.
Unconformity
Carboniferous
Atoka formation, Jackfork sandstone and Stanley shale.
⑥
Shale and sandstone.
① The Brownstown Marl is basal part of Annona Chalk and in some places becomes a part of the solid chalk.
② Bingen is zone classed as, Blossom Sand, Eagle Ford shale and Woodbine sands in the Louisiana fields where section is different than at outcrop.
③ No Washita and Fredricksburg formations show between the Bingen and the Trinity in this section. They are present in places as thick beds of hard limestone.
④ The Trinity formation is usually divided into three parts; Paluxy sand, Glen Rose and Trinity Sand.
⑤ Asphalt deposits occur in, and at the base of the Dierks limestone lentil.
⑥ Diamond-bearing peridotite, near Murfreesboro, Ark., sticks up through the Trinity and the Bingen.

GENERALIZED SECTION OF BEDS EXPOSED NEAR DE QUEEN, ARKANSAS
Showing Nature of Trinity Beds Exposed and Relation to Bingen.
(See U.S.G.S. Bull. 690-B. p.19, Gravel Deposits in Arkansas.)

Oil Production Cost Accounting Methods

Knowing production costs will assist producer in reducing them when reducing becomes necessary

By F. J. Omo
Houston, Texas

THIS is the first of a series of non-technical discussions on oil cost accounting as applied to lease operation, investment costs and revenues. Each of the series is complete in itself and thoroughly covers a particular angle in oil accounting methods.

It is understood that the operation, location and the detailed results desired, govern the kind and character of records and accounts to be kept. The following system outlined is therefore subject to variation in use according to the peculiar conditions to be met.

In planning any system of cost accounting it should be studied from all angles; from an operating standpoint, since the operator can be greatly assisted by knowing what his costs are and where he can reduce them, and this is cetrainly what his cost system should do; from a tax standpoint since the valuation engineer must obtain information from the cost system for use in preparing the valuation schedules from Form "O".

This discussion deals with lease operating and investment costs and revenues, and since this must be tied into the general books, we will first outline and discuss the general ledger accounts. It is desired to keep the balance sheet as simple as possible and yet show clearly the financial condition, and since this is made from the general books, it is common practice to arrange the general ledger in somewhat the same manner as the balance sheet, carrying on it, if possible, only the balance sheet accounts.

Following is an outline of the general ledger accounts of a medium sized operator, whose system of accounting will form the basis of this article:

Asset Accounts

I. Investments
Lands in fee and leaseholds.
Plant investment.
Appreciation due to discovery.*
Other physical property.
Sinking funds.
Permanent investments
Capital stock in treasury.

II. Current Assets
Cash.
Temporary investments.
Notes receivable.
Accounts receivable.
Inventories—oil.
Material and supplies.
Other current assets.

Liability Accounts

III. Capital
Capital stock authorized and issued.

IV. Current Liabilities
Notes payable.
Accounts payable.
Accrued liabilities.
Other current liabilities.

V. Reserves
Reserve for depletion.
Reserve for depreciation.
Reserve for contingencies.
Reserve for inventory adjustments.

VI. Surplus
Profit and loss surplus.
Surplus arising through discovery.*

Income Accounts or Income Statement

Operating Income
Operating revenues—oil and gas.
Pipe line revenues from transportation.
Tank car revenues.
Other operating income.

Operating Expenses
Cost of purchases and receipts—oil and gas.
Net change in oil inventory (debit or credit).
Operating and manufacturing expenses.
General administrative expenses.
Inventory adjustments.
Exhaustion of plant.
Retirements.
Other operating expenses.

Other Income
(Non-operating incomes.)

Other Income Deductions
(Non-operating expenses.)

Net balance (profit or loss) of the income accounts to be carried to balance sheet account "profit and loss surplus".

The sub-ledgers segregate these general ledger accounts, which are very general, into departments, and then detail the cost of each to such point as desired or outlined by the cost system.

By the word department wherever used here is meant the various branches of the industry, as, producing transporting, refining, marketing, etc., and does not in any sense refer to an office department.

The operator referred to is engaged in the producing, transporting and refining of petroleum, and a separate set of sub-ledgers is kept for each of these

*Contra accounts do not show on balance sheet.

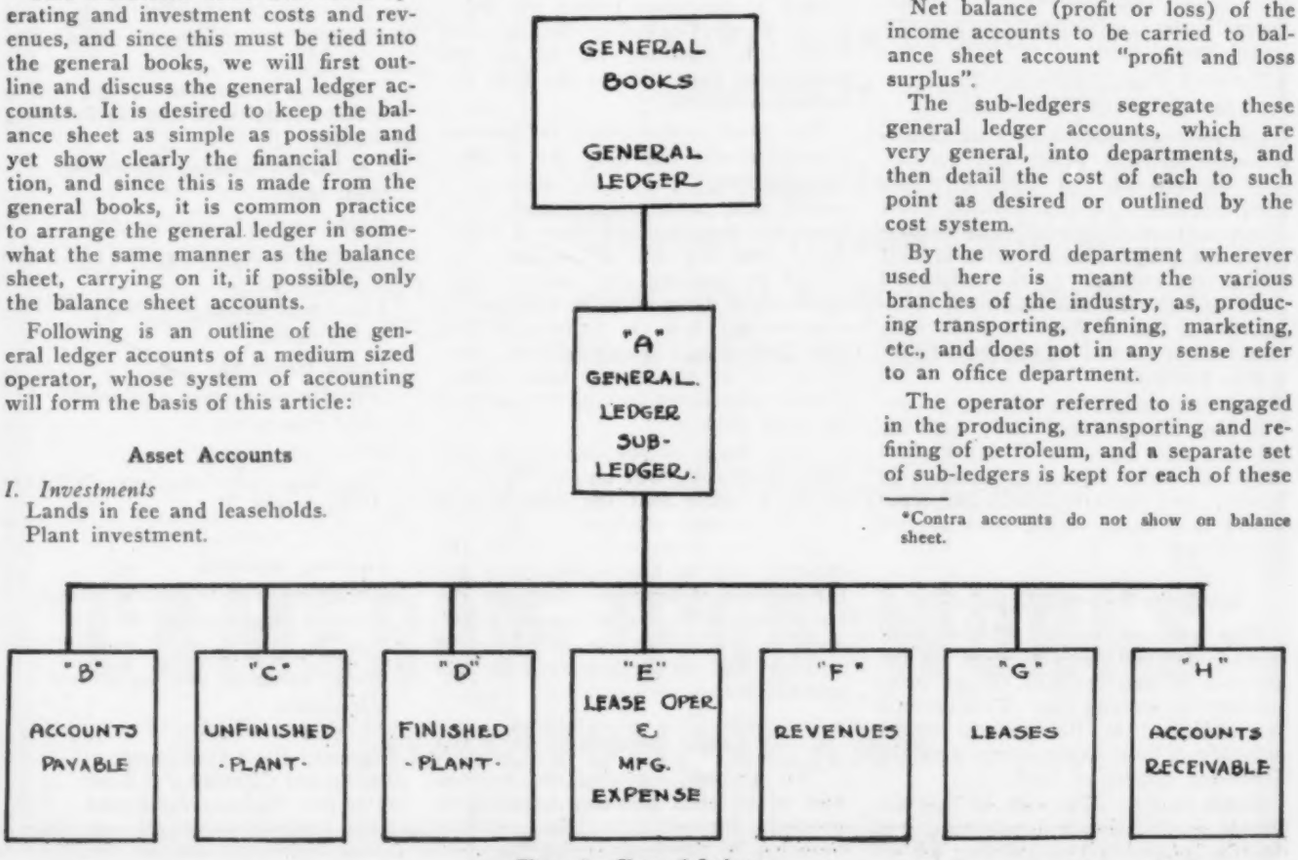


Figure 1. Chart of Ledgers.

different branches. In addition to these departments the operator in pursuit of his business and, in fact, any operator, will have expenses and revenues which he can not apply to any particular branch, and proper sub-ledger provision must be made for these items.

The method of originating the entries and applying to the ledgers will not be discussed. The operators as a rule use the voucher system.

The outline of the system of ledgers used with the above general ledger accounts can best be explained graphically, and the reader is referred to figure 1, explained as follows:

Book "A," is the general ledger sub-ledger in which are carried the controls of the sub-ledgers. This ledger subdivides each general ledger account into departments and subdivisions for ease in auditing and checking the sub-ledgers. In this ledger is also the detail of some accounts for which no other sub-ledger is carried. Since the general books are usually only posted once a month and then only in total, this record is very important.

Books "B" to "H" are the detail sub-ledgers, a separate set of these ledgers being carried for each department. They are controlled by the sub-ledger above and to illustrate how this control is accomplished we will take the plant investment account, and analyze its controls.

On the general ledger we have the one account "plant investment." In the general ledger sub-ledger this account is subdivided into:

Finished plant investment.

Unfinished plant investment.

Uncompleted authorized work (memorandum account only) and further, into departments for each of these classifications. In the finished plant investment sub-ledger of each department the proper sub-accounts of that branch are carried. In the unfinished plant investment sub-ledger of each branch the cost of the work under construction is carried under the authorization numbers.

The records and the method of control now having been briefly outlined, we will take up each of the general ledger accounts separately, some only briefly, and others more in detail where they apply to the main subject of this articles.

Lands in Fee and Leaseholds

This account carries the cost of lands in fee and leases acquired for the purpose of and incident to the prospecting for oil and gas. This account is subdivided in the general ledger sub-ledger into departments and the following classes of land:

Lands in Fee: The cost of land acquired in fee simple incident to and for the purpose of prospecting for oil and gas. The sub-ledger should further segregate this class of land, as between that acquired for prospecting and that acquired for some specific purpose, such as tank sites, rights of ways, etc. In addition to the cost of land owned in fee simple for prospecting purposes, this account should only include the cost of land for a specific purpose which has not been used for that purpose at the time the account is closed. When the land is used for a specific purpose incident to the producing of oil and gas it should be credited to this account and charged to the cost of the facility or facilities for which used.

Undeveloped Leases: The cost of oil and gas leases acquired but upon which no development has been started. When development has been started on a lease its cost should be credited to this account and charged to the account "active non-producing leases".

Active Non-Producing Leases: The cost of leases upon which developments have been started but which have not as yet produced oil or gas in commercial quantities. When a lease whose cost is charged to this account produces oil or gas in commercial quantities, the cost of such lease should be credited to this account and charged to the account "producing leases".

Producing Leases: The cost of leases producing oil and gas in paying quantities. When a lease is temporarily abandoned it should be credited to this account and charged to the active non-producing lease account. This account should at all times reflect the value (cost) of the leases of the operator which are producing oil or gas in commercial quantities at the time the books are closed.

The word cost applied to this account includes not only the original consideration, but any subsequent rentals paid, taxes assessed against the lease, but unpaid at the time of acquisition, and any and all expenses incurred in securing the lease. If desired these items may be charged to expense, but it is the writer's opinion that they should be capitalized. Any bonus in oil paid for a lease should also be considered part of the costs as or when paid.

The form of the record for the lease accounting will not be discussed except to state that the form should provide enough columns so that the original consideration, rentals, and the expense may be shown separately for the purpose of analysis. Carrying the leases by numbers is, of course, understood, since that is the only way in which they can be satisfactorily accounted for.

Plant Investment

This account contains the original cost of physical property acquired or erected incident to the various branches of the business of the operator. It also contains the cost of improvements or betterments to property acquired or erected, which can be classed as capital investment, and is not maintenance expense.

The term plant investment is here used in its broadest sense and includes well costs, machinery and equipment, automobiles, trucks, all other forms of highway equipment, buildings, etc. When any property is acquired, any equipment on such property should be charged to this account at cost. If equipment is acquired and the original cost is not known, a fair estimate of such cost should be made and charged to this account.

The general ledger account contains the total cost of the plant investment without regard to kind, division or department. To properly apply taxes and depreciation in the operating cost system, the cost of the equipment must be segregated into departments and then into the proper sub-accounts of each department. This is accomplished through the sub-ledgers of each department controlled by the general ledger sub-ledger.

Since each department uses more or less different equipment requiring their own individual classification, it will probably be best to take up each one of these different branches separately:

Plant Investment Accounts Production Department

The production department handles the drilling of wells, equipping them for producing, and erecting the general facilities incident to the prospecting, developing and producing of oil and gas.

The plant investment for this branch should be subdivided into the following accounts:

Oil and Gas Producing Equipment:

Well costs.

Producing wells equipment.

Lease boiler plants, power and auxiliary plants.

Lease pipe lines.

Lease tanks.

Lease buildings.

Miscellaneous lease equipment.

General Properties:

Oil tanks—storage.

Warehouse and employes buildings and equipment.

Treating plants.

Delivery facilities.

Telegraph and telephone lines.

Electric power plants.

Office equipment.

Shop buildings and equipment.

Air plants.

Other general properties.

Unfinished Plant Investment:

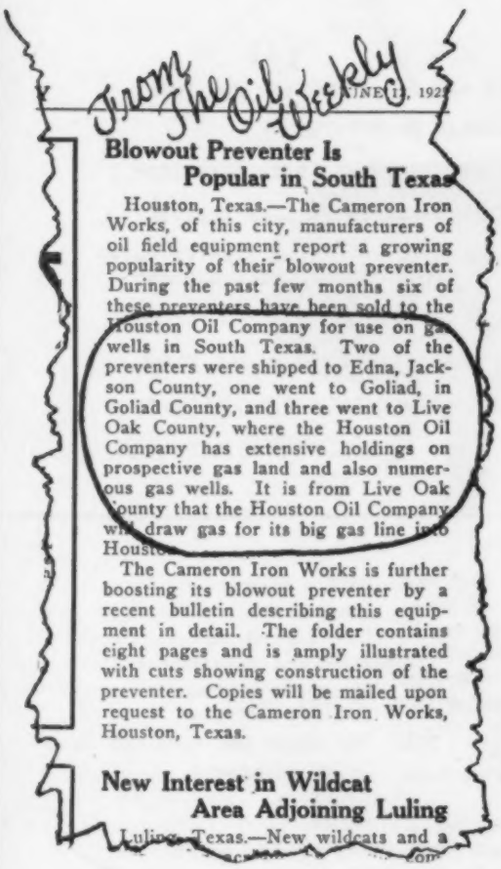
Drilling and Cleaning Out Tools.

Autos and Highway Equipment.

The accounts under oil and gas producing equipment are the classification of equipment located on the leases and

C. I. W. Blowout Preventers

Will Safeguard Natural Gas Supply for City of Houston


From The Oil Weekly
JUNE 27, 1925

Blowout Preventer Is Popular in South Texas

Houston, Texas.—The Cameron Iron Works, of this city, manufacturers of oil field equipment report a growing popularity of their blowout preventer. During the past few months six of these preventers have been sold to the Houston Oil Company for use on gas wells in South Texas. Two of the preventers were shipped to Edna, Jackson County, one went to Goliad, in Goliad County, and three went to Live Oak County, where the Houston Oil Company has extensive holdings on prospective gas land and also numerous gas wells. It is from Live Oak County that the Houston Oil Company will draw gas for its big gas line into Houston.

The Cameron Iron Works is further boosting its blowout preventer by a recent bulletin describing this equipment in detail. The folder contains eight pages and is amply illustrated with cuts showing construction of the preventer. Copies will be mailed upon request to the Cameron Iron Works, Houston, Texas.

New Interest in Wildcat Area Adjoining Luling

Luling, Texas.—New wildcats and a

For many years the Houston Oil Company has used C. I. W. Blowout Preventers on all drilling in high gas pressure fields. They know from experience that

The C. I. W. Blowout Preventer will furnish positive protection against the highest gas pressure encountered in well drilling.

At a very small cost, the C. I. W. Blowout Preventer will secure your well against damage or destruction by blowout.

Write for Complete Information

CAMERON IRON WORKS

HOUSTON, TEXAS

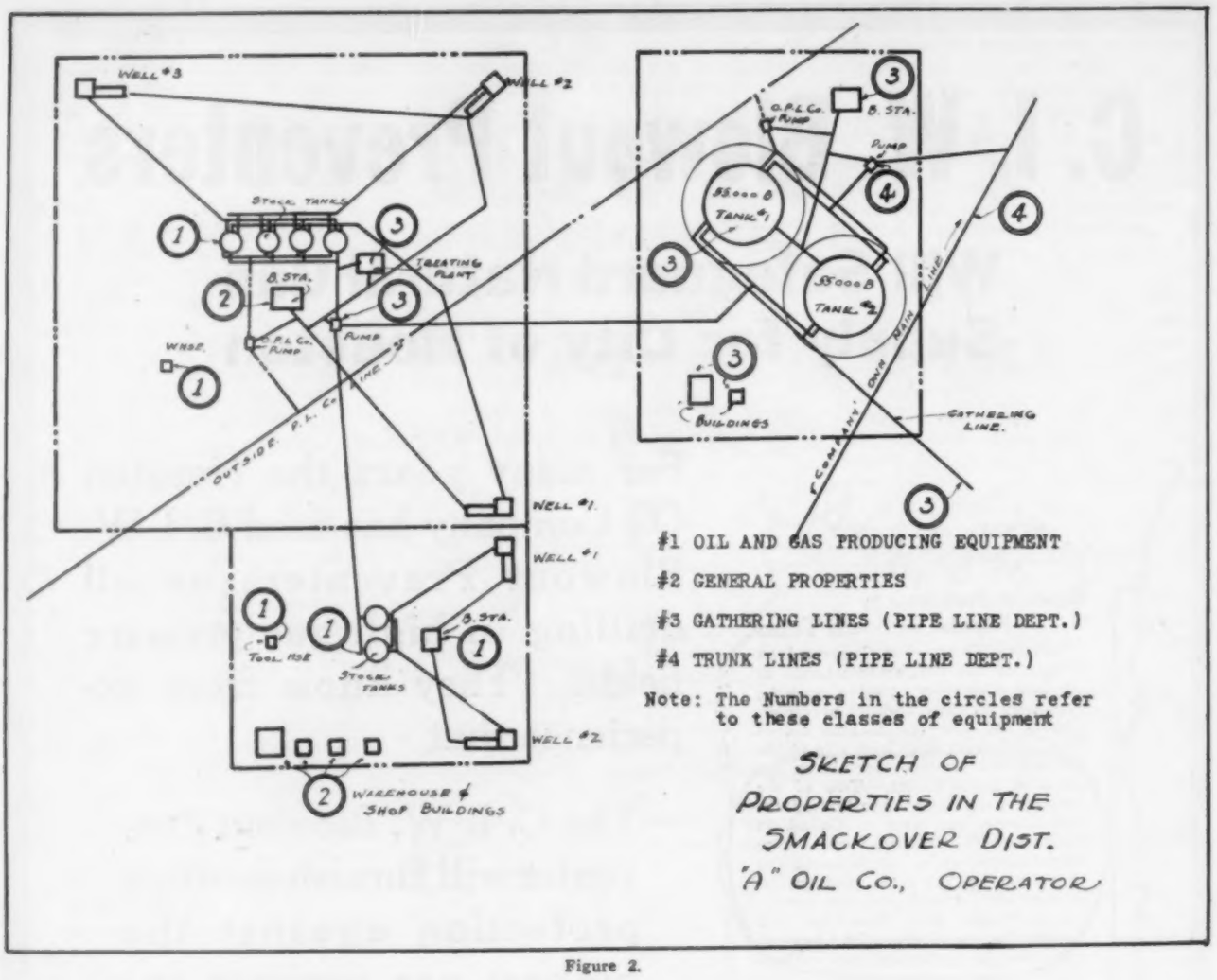


Figure 2.

used directly to produce the oil and gas. The cost of the equipment on each lease should be carried separately in the finished plant investment subledgers.

The accounts under general properties are the classification of equipment used in a district by more than one lease, and whose cost of operation, but not is investment, is properly chargeable to the leases which it serves.

To better illustrate this differentiation between the oil and gas producing equipment and that which should be charged to the general properties accounts, attention is called to figure No. 2, which is self explanatory.

The account unfinished plant investment contains the cost of work under construction which upon completion will be transferred to its proper account under either oil and gas producing equipment or general properties.

The account drilling and cleaning out tools contains the cost of the equipment for each rig carried under its number. This account is usually not segregated into districts, since the rigs are continually moving from one field to another, and if segregated the accountant would be continually transferring their cost from one account to another.

The account autos and highway equipment contains the cost of automobiles, trucks, teams, live stock, wagons, tractors, motorcycles, etc., and is segregated into districts. All of the highway equipment in a district being carried collectively.

Plant Investment Accounts, Pipe Line Department

This department handles the transporting and storing of the oil. The operator, whose system is under discussion, does not come under the I. C. C., so that his accounts and procedure will not of course be in strict accordance with their classification. In outlining a system of accounting for the pipe line department it is well to carefully study this I. C. C. classification and if there is any possibility of the operator in the near future coming under the I. C. C. in his pipe line operations the accounts for this department should be outlined so as to be readily convertible into that classification. The following is the outline of accounts used by the operator whose system is under discussion:

Plant Investment Pipe Lines

Gathering Lines	Trunk Lines
Fee lands	Rights of way
	Line pipe
	Line pipe fittings
	Pipe line construction
	Oil tanks—storage
	Delivery facilities
	Telephone and telegraph lines
	Office equipment
	Buildings
	Boilers
	Engines and pumps
	Machine tools and machinery
	Other station equipment
	Other property.

Unfinished Plant Investment

Autos and Highway Equipment

The same accounts are used for main and trunk lines, each class of lines, by districts, carried separately in the finished plant investment sub-ledger.

Plant Investment Accounts—Gas Department

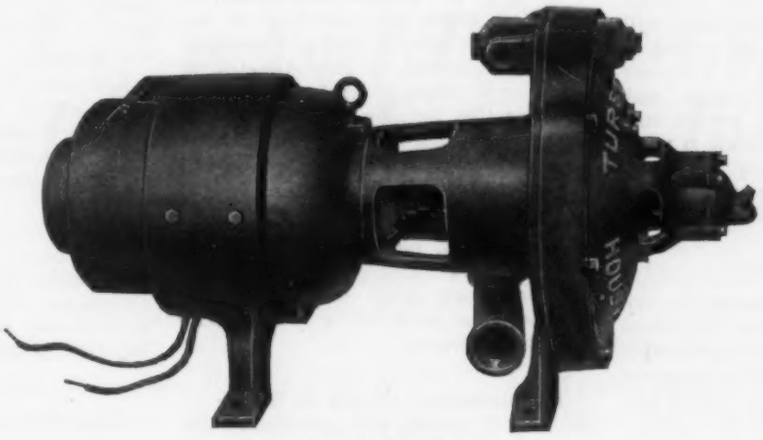
This branch handles the transporting and deliverey of gas to the consumer from the gas wells of the production department. The following system of accounting for the gas department is for an operator delivering the gas to consumer under high pressure only, and

(Continued on page 70.)

"Turbolite"

[Registered U. S. Patent Office]

Lighting Generators for Oil Field Service



Patented Model "S"

The Model "S" is a full rated 3 K. W. Generator with a capacity of seventy-five 40-Watt lamps or the equivalent in larger or smaller sizes.

The rugged design and careful construction insure "Turbolite" users against delays and maintenance costs.

Regularly manufactured in various sizes to suit any oil field requirements.

Houston Pump & Supply Co.

Carr and Leona Streets

Houston, Texas

PERSONAL MENTION-MEN YOU KNOW

Stewart Back From Europe

Chicago, Ill.—An optimistic view as to conditions in the oil industry both in this country and in Europe and other foreign companies is taken by Colonel Robert W. Stewart, chairman of the board of the Standard Oil Company (Indiana), who has recently returned to Chicago from abroad. He was accompanied on his European trip by executives of the Pan-American Petroleum and Transport Company.

"Aside from the United States," Colonel Stewart believes, "the chief sources of future oil supply appear to be Mexico, South America, Russia and Persia. But I believe in the recovery of Europe and that its prosperity will result in a vast expansion in its use of oil. Therefore, there will be a keener contest for sources of oil supply, and it behooves us now to secure our source for future supply. This is what the Standard Oil Company (Indiana) has sought to do in taking over the foreign properties of the Pan-American Company."

Harry Kassebaum, assistant to the president of the California Petroleum Corporation of Los Angeles, accompanied by his wife, is taking his vacation this year in the Yosemite Valley and at Lake Tahoe.

Charles N. Woods, well known oil man and supply dealer of Los Angeles and San Francisco, was found dead in a shallow pool of water near San Mateo, June 18. A wound apparently sufficient to have caused death was found on the back of his head. Although officers are at a loss for evidence, murder for robbery is believed to have been the cause of Mr. Woods' death.

J. C. Thomas has resigned his position with The Texas Company producing department at Ranger, Texas, to become Field Superintendent for the Continental Oil Company at Parkerton, Wyoming, succeeding J. J. Flanagan who has been made assistant general superintendent of operations in Wyoming and Montana, with headquarters at Casper. Mr. Flanagan was an old employe of The Texas Company prior to joining The Continental Oil Company. Mr. Thomas has been in the service of The Texas Company for the past 15 years.

G. C. Riddell, chief of the minerals division of the Bureau of Foreign and Domestic Commerce, has tendered his resignation to Acting Director O. P. Hopkins, effective July 1, it has been announced by the Department of Commerce. He will shortly leave for the West to examine the plants and properties of an oil company with which he will be associated in an advisory capacity. After a month's inspection of the California, Utah and Wyoming properties of the company, Mr. Riddell will locate in New York as a consulting engineer.

"G. A. T. X." Musser, well known as the West Coast representative of the General American Tank Car Company, with headquarters at Los Angeles, is spending a couple of weeks in Chicago in order that he may tell the "Native Sons" upon his return what kind of real summer weather they are having in Illinois.

P. J. Dasey, oil field representative of the Climax Engineering Company, Clinton, Iowa, spent several days in Houston last week while in this territory on business.

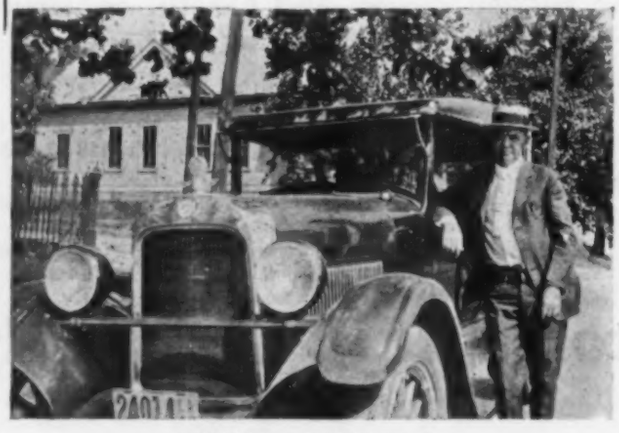
The numerous friends of Victor C. Svimonoff, mining and petroleum engineer, Ohio State University, 1911, and the University of Pittsburgh, 1912, and known in the oil fraternity of Oklahoma, Texas, Louisiana and California, as well as in the Caucasus, Persia and Egypt, will be glad to learn that his wife, Dr. P. P. Svimonova, University of Toulouse, France, with her eight-year-old daughter and five-year-old son, Constantin, have, after four years' stubborn refusal, been allowed by the Moscow "humanitarians" to leave Russia (Soviet Union) and are already beyond the boundaries on their way to California where they will rejoin Mr. Svimonoff, now in the employ of the General Petroleum Corporation.

Mr. Svimonoff came back to the United States in 1921 after his native land passed into the hands of the "red" invaders. In 1923 he went to Georgia in order to bring his family, which could not come with him in 1921 to America. The Soviets became suspicious of this trip of Mr. Svimonoff, and he was forced to return to Persia for safety where he endeavored for some time to gain the release of his family from the Bolos. After a prolonged stay in Persia he returned to this country.

Recently, through the work of the late General Nelson A. Miles, Hon. Thomas A. H. Hay and Prof. H. B. Meller, the wife and two small children of Mr. Svimonoff were granted their freedom.

Mr. Svimonoff wishes to acknowledge publicly and to extend his deep appreciation and thanks to his college chums and other American friends who were in any way responsible for gaining the release of his family.

Allan D'Heur of San Francisco, vice president of the Pacific Oil Company, died last week at a San Francisco hospital after an illness that extended over a period of about 18 months. He came to the United States from Belgium in 1886 and entered the employ of the Southern Pacific two years later in Texas and Louisiana as an engineer. He joined forces with the oil company when it was formed by the Southern Pacific. Mr. D'Heur was a close friend of the late Julius Krutschnitt.



CHARLES C. HUMMER, Jr.
Drilling superintendent in and around Shreveport for the Louisiana Oil Refining Corporation, takes a moment off to pose with his latest combination business and pleasure car, the new Studebaker six.

M. H. Whittier, well known throughout California oil circles as Max, died suddenly at a sanitarium near Redlands, June 27. Mr. Whittier entered the oil business in the field, and worked his way from driller to the head of several oil companies. He assisted in the organization of the Associated Oil Company and was a member of the executive board of that company. He had recently returned from a three months tour abroad. Throat trouble is thought to have caused the death of Mr. Whittier. He died at the age of 59.

"Old Sol" is Your Poorest Customer —He Never Pays His Bills

[ALUMINUM PAINT consists of Aluminum Bronze Powder properly blended with a vehicle of oil or varnish]

THE sun is receiving shipments of thousands of barrels of oil via *evaporation.*

And he never pays for them—so they must be charged off as a dead loss.

Aluminum Paint puts a quick stop to these shipments, and reroutes them to paying customers.

Out in Oklahoma, the Bureau of Mines got together with the State Officials and held an evaporation test.

They painted each of four 55s a different color. One gray — one red — one black — and one with Aluminum Paint.

The Aluminum Painted tank won by long odds.

It saved 100 barrels over the gray tank—162 over the red—and 202 over the black 55.

All of these barrels were lost right off the top—high test oil.

Here's how the gravity dropped off—Black Tank, .6°, A. P. I., Red, .5°; Gray, .3°; Aluminum only .2°.

The Aluminum Painted Tank won because Aluminum Paint *reflects* the sun's light and heat rays, instead of absorbing them.

Heat causes evaporation. Aluminum Paint keeps the tanks cool and prevents sun-loss.

Write today for samples of Aluminum Bronze Powder and our booklet—"Aluminum Paint."

It gives further facts that show how to increase your profits by selling more oil to your customers and giving less to the sun.

Some Facts About Aluminum Paint

—Made of pure metallic aluminum
—Keeps tanks cool by reflecting—instead of absorbing—sun's heat
—Small cost—first and last
—Usually outlasts any other paint
—Fumes and gas do not stain it readily
—One coat will hide any other color
—Flows on easily—dries quickly and hard
—500-600 square feet coverage per gallon
—Improves lighting when used in building interiors

ALUMINUM PAINT

Aluminum Company *of* America
2402 Oliver Building
Pittsburgh, Pa.

OFFICES IN EIGHTEEN PRINCIPAL AMERICAN CITIES

Summary of Field Operations for June

Eastern States

County—	Completions	Producers	Gas Wells	Failures	Initial Prod.
Pennsylvania	180	145	22	13	695
West Virginia	122	46	62	14	521
Ohio	188	128	30	30	2,228
Kentucky	164	111	11	42	1,625
Illinois	27	15	1	11	347
Tennessee	9	4	1	4	850
Indiana	12	9	..	3	134
New York	20	20	..	..	92
Total	722	478	127	117	6,492

PENNSYLVANIA

Allegheny	3	2	1	..	4
Beaver	3	2	1	..	4
Bradford	91	88	..	3	348
Butler	23	12	9	2	89
Center-Middle	12	10	1	1	73
Clarion	11	5	4	2	12
Greene	12	1	6	5	12
Oil City Field	1	1	..	..	100
Venango	24	24	..	..	53
Totals	180	145	22	13	695

WEST VIRGINIA

Boone	5	..	5	..	..
Cabell	1	..	1	..	..
Calhoun	9	3	6	..	23
Clay	2	..	2	..	..
Doddridge	10	7	2	1	136
Gilmer	10	2	7	1	12
Harrison	6	2	3	1	10
Kanawha	8	1	6	1	5
Lewis	3	..	2	1	..
Lincoln	9	1	8	..	5
Logan	1	..	..	1	..
Marion	3	..	3	..	..
Marshall	7	3	3	1	33
Monongalia	3	2	..	1	10
Pleasants	3	2	..	1	6
Putnam	5	3	1	1	54
Ritchie	15	7	5	3	137
Roane	4	..	4	..	..
Tyler	5	3	2	..	25
Wetzel	7	5	2	..	43
Wirt	1	..	..	1	..
Wood	5	5	..	..	22
Totals	122	46	62	14	521

OHIO

Allen	5	5	..	..	30
Ashland	1	..	1	..	..
Athens	11	5	4	2	28
Auglaize	5	5	..	..	85
Belmont	1	1	..	..	5
Columbiana	1	1	..	..	2
Coshocton	4	1	2	1	10
Crawford	1	..	..	1	..
Fairfield	3	1	1	1	5
Guernsey	4	1	3	..	3
Hancock	7	7	..	..	122
Hardin	3	2	..	1	152
Hocking	6	6	..	..	137
Holmes	6	2	3	1	60
Knox	6	5	1	..	11
Lawrence	1	..	1	..	..
Licking	21	18	3	..	629
Lorain	1	..	1	..	..
Lucas	1	1	..	..	5
Meigs	1	1	..	..	10
Mercer	8	8	..	..	50
Monroe	3	1	..	2	10
Morgan	9	5	3	1	49
Muskingum	6	4	..	2	30
Noble	11	5	1	5	14
Ottawa	2	2	..	..	26
Paulding	1	1	..	..	70
Perry	6	4	1	1	192
Sandusky	5	5	..	..	34
Shelby	6	6	..	..	174
Tuscarawas	1	..	..	1	..
Van Wert	1	1	..	..	35
Washington	19	12	2	5	50
Wayne	7	3	3	1	60
Wyandot	1	..	..	1	..
Wood	13	9	..	4	113
Totals	188	128	30	30	2,228

KENTUCKY

County—	Completions	Producers	Gas Wells	Failures	Initial Prod.
Allen	23	17	..	6	203
Barren	41	31	3	7	304
Boyd	1	..	1	..	..
Brethitt	1	..	..	1	..
Clay	1	..	..	1	..
Cumberland	2	2	..	..	130
Edmonson	1	1	..	..	2
Elliot	1	..	..	1	..
Estill	4	3	..	1	12
Floyd	6	2	3	1	5
Greenup	1	..	..	1	..
Henry	1	1	..	..	5
Hopkins	1	1	..	..	5
Jackson	1	..	..	1	..
Johnson-Magoffin	6	5	1	..	27
Knox	1	..	..	1	..
Lawrence-Johnson	15	14	..	1	337
Lee-Owsley	5	2	2	1	9
McCreary	1	1	..	..	5
Morgan	1	1	..	..	5
Metcalf	3	..	..	3	..
Muhlenberg	1	..	1	..	..
Owensboro Dist.	16	12	..	4	285
Simpson	2	2	..	..	4
Warren	20	14	..	6	279
Wayne	7	2	..	5	8
Wolfe	1	..	..	1	..
Totals	164	111	11	42	1,625

ILLINOIS

Clark	13	10	..	3	329
Coles	2	..	..	2	..
Crawford	5	3	1	1	5
Lawrence	2	1	..	1	1
Marion	1	1	..	..	12
Wabash	4	..	..	4	..
Totals	27	15	1	11	347

TENNESSEE

Clay	1	..	..	1	..
Clay-Jackson	6	3	..	3	650
Morgan	2	1	1	..	200
Totals	9	4	1	4	850

INDIANA

Adams	1	1	..	..	3
Delaware	1	..	..	1	..
Gibson	3	2	..	1	37
Jay	4	4	..	..	57
Pike	3	2	..	1	37
Totals	12	9	..	3	134

NEW YORK

Alleganay	20	20	..	..	92

SUMMARY OF OKLAHOMA PRODUCTION BY FIELDS

Tonkawa	1,800,450
Burbank	1,747,110
Bristow	1,348,500
Cromwell	1,173,060
Osage	1,085,360
Okmulgee	756,150
Cushing	633,600
Wewoka	558,150
Gilcrease-Papoose	476,970
Hewitt	446,400
Garber	328,560
Otoe	221,070
Stroud	131,880
Braman	129,030
Other Fields	2,548,750
Total	13,185,040

Oklahoma

County—	Completions	Producers	Gas Wells	Failures	Initial Prod.
Kay	23	13	2	8	8,374
Creek	64	39	6	19	9,423
Pawnee	27	20	1	6	4,240
Garfield	14	12	..	2	3,362
Seminole	47	37	..	8	24,519
Hughes	26	17	3	6	2,898
Okfuskee	24	10	1	13	1,912
Wagoner	12	1	3	8	10
McIntosh	2	..	..	2	..
Carter	18	14	..	4	3,812
Jefferson	5	2	..	3	600
Osage	83	55	3	25	5,186
Burbank field	17	17	..	..	5,205
Okmulgee	49	26	3	20	2,495
Tulsa	16	8	4	4	990
Atoka	2	..	..	2	....
Grady	4	..	4	..	....
Garvin	1	..	..	1	....
Muskogee	3	..	..	3	....
Payne	2	1	1	..	250
Stephens	14	4	3	7	160
Lincoln	3	..	..	3	....
Grant	1	1	..	..	20
Cotton	1	..	..	1	....
Totals	456	279	34	145	73,456

MONTHLY PRODUCTION SUMMARY OF KANSAS BY FIELDS

Field—	Barrels
Greenwood	848,310
Rainbow Bend	621,150
Eldorado	422,250
Ebling and Peabody	169,260
Augusta and Douglas	94,620
Fox-Bush	88,320
Blankenship	70,650
Florence and Covert	59,670
Other Fields	644,430
Totals	1,918,660

Kansas

Butler	16	5	..	11	1,130
Coffee	1	1	..	..	35
Cowley	46	25	..	21	16,604
Greenwood	78	60	..	18	8,293
Russell	7	6	..	1	1,572
Trego	1	..	..	1	....
Sumner	5	3	..	2	426
Elk	14	6	6	2	350
Woodson	5	3	..	2	80
Lyon	1	..	..	1	....
Marion	2	..	..	2	....
Sedgwick	2	..	..	2	....
Riley	1	..	..	1	....
Chase	1	1	..	..	130
Montgomery	7	..	..	7	....
Rice	1	..	..	1	....
Totals	188	110	6	72	28,620

California

Brea	1	1	..	..	290
Cat Canyon	..	..	..	..	....
Comanche Point	..	..	..	..	....
Coyote Hills	..	..	..	..	....
Dominguez	2	2	..	..	1,520
E. Kern River	..	..	..	..	....
Elk Hills	..	..	..	..	....
Hovey Hills	..	..	..	..	....
Huntington Bch.	6	6	..	..	2,730
Inglewood	34	34	..	..	48,980
Jacalitos Dome	..	..	..	..	....
La Habra	1	1	..	..	100
Long Beach	9	9	..	..	3,435
McKittrick	1	..	..	1	....
Midway	7	7	..	..	1,825
Montebello	..	..	..	..	....
Murphy-Coyote	2	2	..	..	690
Olinda	1	1	..	..	345
Rio Bravo	..	..	..	..	....
Rosecrans	19	19	..	..	21,045
Richfield	3	3	..	..	1,545
Santa Fe Springs	..	..	..	..	....
Salt Lake	..	..	..	..	....
Santa Barbara County	1	1	..	..	200
San Luis Obispo	..	..	..	..	....
San Erindio Dist.	..	..	..	..	....
Santa Clara Co.	..	..	..	..	....
S. Kern River	..	..	..	..	....
Sunset	2	2	..	..	20
Torrance	20	20	..	..	1,450
Tulare County	..	..	..	..	....
Ventura	2	2	..	..	875
Weed Patch	..	..	..	..	....
Whittier	..	..	..	..	....
Wheeler Ridge	..	..	..	..	....
Totals	111	110	..	1	85,050

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Make sure that it ~

Operates Easily In opening a Darling Valve the compound equalizing wedges are released with the first turn of the stem, allowing easy withdrawal of the discs. In closing, the discs are lowered until opposite the seats before spreading of wedges force them squarely against seats.

Can't Jam Simple, compact mechanism with no pockets to collect grit or scale prevents jamming. Darling has no troublesome disc guides—and needs none.

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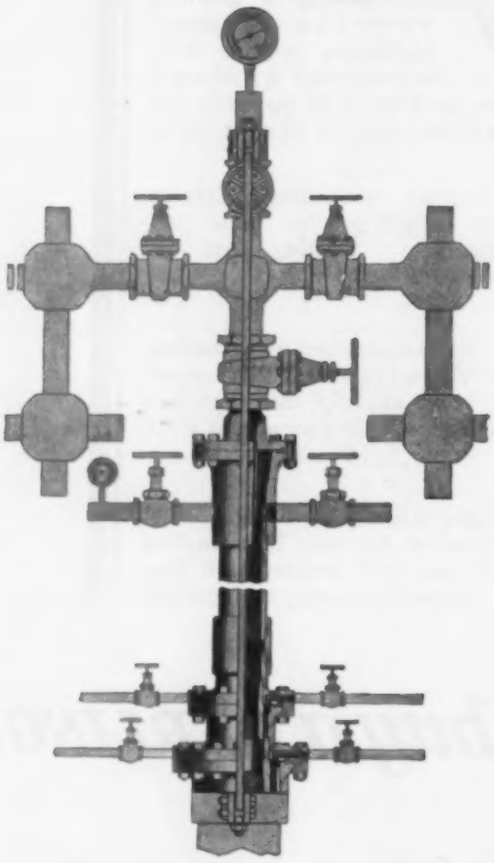

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Say you saw it in The Oil Weekly

Mountain States

County—	Completions	Producers	Gas Wells	Failures	Initial Prod.
Wyoming	62	55	..	7	4,010
Montana	17	15	1	1	3,976
New Mexico	7	7	..	..	3,030
Colorado	4	2	..	2	400
Utah	..	..	..	..	....
Totals	90	79	1	10	11,416
MONTANA					
Cat Creek	1	1	..	..	40
Kevin-Sunburst	16	14	1	1	3,936
Springdale Structure	..	..	..	..	....
Totals	17	15	1	1	3,976
COLORADO					
Lafayette Structure	1	..	..	1	....
Thornburg Dome	..	..	..	..	....
Florence Field	1	1	..	..	50
Fort Collins Dome	1	1	..	..	350
San Juan County	..	..	..	..	....
Sage Creek Dome	1	..	..	1	....
Iles Dome	..	..	..	..	....
Totals	4	2	..	2	400
NEW MEXICO					
Artesia Field	3	3	..	..	1,900
Bloomfield Mesa	2	2	..	..	80
Eddy County	2	2	..	..	1,050
Totals	7	7	..	..	3,030
WYOMING					
Salt Creek	53	52	..	1	3,575
Lost Soldier	2	..	..	2	....
Notches Dome	1	1	..	..	300
N. Casper Creek	1	..	..	1	....
Rex Lake Field	2	1	..	1	100
Sage Creek	1	..	..	1	....
Simpson Ridge	2	1	..	1	35
Baxter Basin	..	..	..	..	....
Black Mountain	..	..	..	..	....
Totals	62	55	..	7	4,010

Texas

Field—	Completions	Producers	Gas Wells	Failures	Init. Prod.	Monthly Prod.
N. Texas	265	150	..	115	13,025	2,939,300
Cent. and W. Texas	57	35	..	22	23,945	2,199,170
E. Texas	3	..	1	2	....	.....
E. Cent. Texas	46	37	..	9	2,490	3,516,350
Gulf Coast	94	63	1	30	34,371	2,909,390
Texas Misc.	13	13	..	..	8,260	1,583,070
Totals	478	298	2	178	82,081	13,147,280
GULF COAST						
Barbers Hill	..	..	..	..	....	6,630
Batson	2	2	..	..	170	44,190
Blue Ridge	..	..	..	..	....	38,100
Damon M'nd	..	..	..	..	....	35,160
Goose Creek	6	4	..	2	1,650	324,540
High Island	..	..	..	..	....	22,500
Hull	11	10	..	1	11,915	638,510
Humble	..	..	..	..	....	153,240
Markham	..	..	..	..	....	3,390
Nacogdoches	..	..	..	..	....	900
Orange	9	7	..	2	1,131	404,790
Pierce Junct.	4	1	..	3	45	15,090
Big Creek	6	..	1	5	....	15,000
Saratoga	5	3	..	2	305	50,280
Spindle Top	3	1	..	2	20	41,460
S. Liberty	39	34	..	5	19,115	631,830
Sour Lake	2	1	..	1	20	129,990
W. Columbia	..	..	..	..	....	353,790
Wildcats	7	..	..	7	.....	.....
Totals	94	63	1	30	34,371	2,909,390
TEXAS MISCELLANEOUS						
Luling	1	1	..	..	200	816,930
Mirando	2	2	..	..	60	313,500
Lytton Spgs. (Lockhart)	9	9	..	..	7,700	347,730
Somerset	..	..	..	..	....	84,750
Misc. S. Tex.	..	..	..	..	....	20,160
Wildcats	1	1	..	..	300	.....
Totals	13	13	..	..	8,260	1,583,070

Well, Well, Well!

HOW in the world are you? The boys at the office have been using this space so long, and always with a picture of a PELCO Bit, that I thought I might slip up on your blind side by putting in a personal appearance, so to speak.

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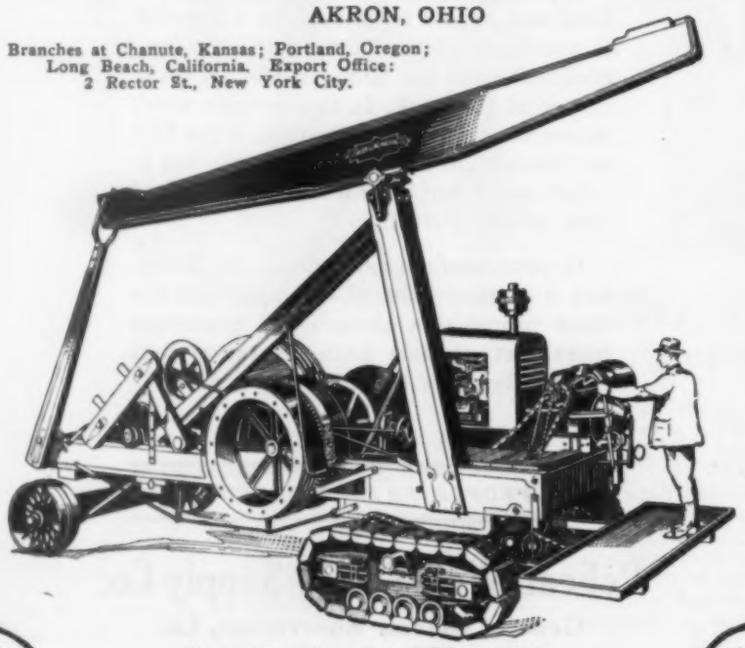

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"The Wrench People"

New York BUFFALO Chicago

NORTH TEXAS

County—	Completions	Producers	Gas Wells	Failures	Init. Prod.	Monthly Prod.
Archer County	114	70	44		4,660	1,138,425
Electra	28	19	9		825	513,190
Burkburnett	6	3	3		160	447,450
Young County	41	18	23		1,495	321,975
South Vernon	25	21	4		*4,045	265,800
K-M-A and Iowa Park	18	9	9		1,235	127,090
Panhandle Dist.	3	3	..		†85	104,100
Petrolia—Clay County	..	..	..		....	13,315
Montague County	4	2	2		60	4,840
Throckmorton County	..	..	..		....	2,325
Jack County	..	..	..		....	790
Wildcats	26	5	21		‡460	.....
Totals	265	150	115		13,025	2,939,300

*Includes 9,000,000 ft. gas.
†Includes 39,300,000 ft gas.
‡Includes 1,500,000 ft gas.

CENTRAL WEST TEXAS

Big Lake—Reagan County	6	5	1		*11,855	904,890
Stephens Co.	18	17	1		†9,735	600,040
Eastland Co.	11	7	4		‡315	314,025
Callahan Co.	5	..	5		....	115,350
Moran-Shackelford Co.	9	4	5		840	109,915
Brown Co.	10	8	2		550	66,185
Mitchell Co.	3	3	..		650	65,400
Strawn-Palo Pinto Co.	1	1	..		‖	17,290
Coleman Co.	..	..	..		....	2,625
Scurry Co.	..	..	..		....	1,875
Thrall-Williamson Co.	..	..	..		....	1,575
Wildcats	4	..	4		....	.....
Totals	57	35	22		23,945	2,199,170

*Includes 45,000,000 cu. ft. gas.
†Includes 5,500,000 cu. ft. gas.
‡Includes 2,000,000 cu. ft. gas.
‖Includes 4,000,000 cu. ft. gas.

EAST CENTRAL TEXAS

Corsicana-Powell	34	32	2		1,915	1,494,750
Wortham	3	3	..		350	1,234,125
Mexia	..	..	..		....	605,435
Richland	..	..	..		....	140,040
Currie	..	..	..		....	42,000
Wildcats	9	2	7		*225	.....
Totals	46	37	9		2,490	3,516,350

*Includes 1,500,000 ft. gas.

EAST TEXAS

Waskom Gas Field	2	..		1	1	....
Panola Gas Field	1	..		..	1	....
Totals	3	..		1	2	....

Arkansas

Field—	Completions	Producers	Gas Wells	Failures	Init. Prod.	Monthly Prod.
El Dorado	1	1	..	..	25	250,200
Irma	3	3	..	..	300	41,640
Smackover	236	212	3	21	375,993	11,547,630
Stephens District	1	1	..	..	8	55,290
Wildcats	7	..	..	7	..	....
Totals	248	217	3	28	376,326	11,894,760

LOUISIANA

Anse La Butte	..	..	..	..	....	600
Bellevue	3	2	1	..	35	105,300
Bull Bayou	..	..	..	..	....	121,740
Caddo	..	..	..	..	....	338,250
Cotton Valley	7	7	..	..	620	341,760
Edgerly	2	1	..	1	5	16,530
Elm Grove	..	..	..	..	....	22,440
Evangeline	6	5	..	1	316	27,180
Haynesville	..	..	..	..	....	395,100
Homer	..	..	..	..	....	200,250
Lockport	2	1	..	1	95	5,310
Monroe	3	..	2	1	....	.....
Sarepta-Shongaloo	1	..	1	..	....	.....
Vinton	8	5	..	3	4,670	260,340
Wildcats	8	..	..	8	....	.....
Totals	40	21	4	15	5,741	1,834,800

HERE'S ROD PULLING ECONOMY

Dewey, Oklahoma,
April 8, 1925.

Mr. Floyd W. Gibson,
Dewey. Oklahoma.

Dear Sir:

In reply to your inquiry as to what results we have been having with the Bradford-Dewey friction wheel pulling machine, wish to advise that we have been using this machine approximately a year now and consider it very much of a success and we estimate that this machine has reduced our pulling cost about one-third. We seem to be able to do at least one-third more work than we could with the old horse power machines. Where it took before two men and a team and teamster, it now only only takes two men.

If we were in need of another machine, I certainly would buy another one like it. Of course this arrangement has the added advantage of being able to use the truck for other purposes when you are not using it pulling wells.

Very truly yours,
TYLER & COMPANY,

By D. M. Tyler.

DMT:EG.

Ask for our illustrated circular which describes both types—Truck and Tractor.

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GENUINE WROUGHT IRON

Say you saw it in The Oil Weekly

Completions and Locations Both Record High Mark in Oklahoma

Continued threat to stability of light oil market seen in development activities

By W. Lee Sloan
Staff Representative

Tulsa, Okla.—Despite the fact that officials of the Prairie Oil and Gas Company sounded a warning that the "brakes" must be applied to Oklahoma drilling, the report for the past week shows that operators did not take the warning seriously and started 115 new wells. This is the largest number of wells to be spudded in during the current year. While operators were starting these 115 wells, they were also completing 127 wells during the same seven days' period, also a new record for the year.

The crisis is about to be reached in light oil circles in Oklahoma. Operators are watching with the utmost interest the potentialities of the Garber deep sand, the same sand in the Thomas pool and the future of Braman's new discovery. The first well to find the sand in the new extension of the Braman pool is expected about the middle of July, while the wells drilling to the deep sand in the Garber pool are drilling ahead at top speed, with many of them getting ready to standardize at 3400 feet. In the Thomas pool the new production will come later than that of Garber. With the expected addition of crude from these three light oil areas, operators are confident that the high gravity market will be weakened somewhat.

New Development Widespread

New development work during the past week seems to be equally divided in all sections of the state. Interest is divided between the new Shaffer Oil & Refining Company's deep sand discovery well north of the Cushing field, the temporary revival of the Guy Fisher well four miles north of Cromwell, the Herbert Oil Company's well at Braman, and the apparent failure of the Sinclair Oil & Gas Company's No. 1 Burns to show oil.

The Shaffer Oil & Refining Company's producing subsidiary, the Deep Rock Oil & Refining Company, completed the deep well a week ago in its No. 1 Goodno in the southwest of the northeast of Section 23-18-3, and it is holding up to a daily average production of approximately 1500 barrels. This wildcat well is located eight miles west of the old Cushing field, near the town of Mahan, and it is expected to be the forerunner of another Cushing field.

Guy Fisher Well Comes Back

The Guy Fisher-Holm & Jarvis well, in Section 15-11-8, north of the Cromwell pool, which was the point of interest several weeks ago when it blew in for a flow of 125 barrels of oil per hour, only to turn almost completely to salt water later, came back for a flow of 70 barrels of fluid per hour, of which 85 per cent was water. With 174 feet of open hole in this probable extension to the Cromwell pool, it has been a difficult job to clean it of cavings and operators have experienced considerable difficulty in reaming the hole to bottom. The four offset wells to this discovery are drilling ahead, with the expectation of opening up a new and prolific pool.

The Herbert Oil Company's No. 1 Community well, which came in several weeks ago at the northeast of Braman townsite, continues to flow on its own pressure and gauged 2722 barrels for one 24-hour period during the past week, showing beyond a doubt that the new area opened by the discovery of this well has a big possibility. A summary of operations in and around this new well shows that there are 39 rigs up and 34 wells being drilled. There are five new rigs building, four locations rigging up, one cellar being dug, and two new locations.

Missed Deep Sand in Thomas

Mystery still surrounds the Twin States Oil Company's No. 2 Siler, northeast of the northwest of the northwest of Section 22-25-2w, a direct south offset to No. 2 Thomas of the Marland Oil Company, the discovery well of the deep sand in the Thomas pool. The Twin States well has drilled to 4140 feet without encountering a sand, while the Thomas well is producing from a sand found at 3955 feet. There is evidence of a fault between the two wells, but operators have not given up hope of the Siler well being a producer on account of the fact that there is some controversy as to the sand depth of the Thomas well. Some geologists have logged the well as running 40 feet lower on the structure than the Thomas well.

With the completion of two new wells in the Yeager pool by the Dixie Oil Company, it has been definitely decided that the producing stratas of the field are the Gilcrease and the Papoose sands. No. 1-C Diamond, in the southeast of the southeast of the northeast of Section 18-8-10, had sand from 3147 to 3148 feet for 25,000,000 cubic feet of gas and 50 barrels of oil as initial production. After allowing the well to blow for two days, the gas pressure decreased and the well made 754 barrels of oil per day. The Dixie's No. 1-A Diamond, northeast corner of the southwest of the southeast of Section 18-8-10, a direct west offset to the discovery well of the pool, is making 700 barrels of oil per day from sand at 3400-09 feet. The latter well will be deepened while efforts are being made to case off the gas and oil at the 3148-foot level in No. 1-C Diamond.

Freak Well Quits Flowing

The Iron Mountain Oil Company's No. 13 Johnson, in the center of the northeast of the southwest of Section 34-13-14, near Morris, which blew in on June 4 for a flood of oil and water from 1960 feet of hole, has quit flowing. The well made 2000 barrels of oil and 7000 barrels of water as initial production, but the oil content of the fluid steadily fell off.

Recent results in the development of the 2300-foot sand in the Garber field have not been as promising as it was expected. The uncovering of this sand in the field was one of the outstanding features of the year and was almost on a par with the deep sand discovery until the Sinclair Oil & Gas Company's No. 18 Belveal swabbed mostly water and filled up only 200 feet of oil in the hole after finding the sand from 2347 to 2357 feet. This disappointment will likely cause the abandonment of Sinclair's Nos. 32 and 33 Belveal, in close proximity to No. 18. Another disappointment was the Roxana Petroleum Corporation's No. 7 Schroeder, in Section 18-23-3w, which is swabbing 90 barrels of oil and 70 barrels of water. The Roxana's No. 10 Schroeder in the same section has filled up 500 feet with oil and 100 feet with water from sand at 2447-61 feet. This is the deepest producing well in the 2300-foot level,

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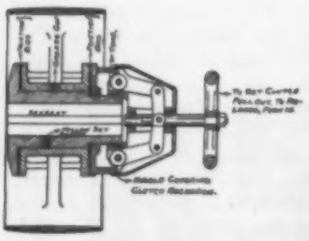

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and it is possible that a new sand has been found a hundred feet below the producing level of the other wells of the area.

K-D Deep Well Shows Water

The K-D Oil Company's well in the northwest of the southeast of Section 1-22-2w, the deepest producing well in the Mid-Continent area, the sand having been encountered at 5145 feet, is now making but one flow of oil each day with a showing of water. The big pipe is now being pulled in the well and it is possible that the water is coming in from above, as a water sand was cased off at approximately 4200 feet, A string of four-inch will be run as soon as the big pipe is pulled.

In the Holdenville pool the Roxana Petroleum Corporation has added another well in its No. 1 Barnett, in the northwest of the southeast of Section 35-8-8. Sand was found at 3278 feet, and from a depth of 3307 feet it was producing 65 barrels per hour as initial production. Monday the Roxana well made 1920 barrels. The Gypsy Oil Company's No. 1 Proctor, discovery well of the pool, is now making approximately 1500 barrels each day.

Corcovado Production Cut By Salt Water Intrusion

Chijol, Ver.—As the result of the intrusion of salt water in its Corcovado holdings, the Mexican Gulf Oil Company has within the past few days lost production averaging 10,000 barrels daily. On June 20, withdrawals from the four Gulf producers in this hacienda were 12,340 barrels when salt water caused No. 25, making 4100 barrels to be pinched to 800 barrels; No. 27, making 3540 barrels to 1500 barrels; No. 35, making 4500 barrels to 635 barrels and No. 44, making 200 barrels daily to be closed in entirely.

The Gulf is the only one of the major companies operating in the Corcovado district that has been at all successful in its efforts although it drilled 17 wells before it obtained its first production.

Both the Mexican Petroleum Corporation and the Sinclair have practically suspended operations in this district because of salt water in their wells. The Mexican Seaboard which has drilled five wells without success, will probably cease its efforts although it had two strings of tools at work as the result of Gulf successes and it is generally believed that independent operators, who have been running approximately 25 strings of tools on acreage of the Cosmos Oil Company, will also withdraw.

The Transcontinental Petroleum Company (Standard, N. J.) has just suffered a loss of 6000 barrels a day production in Cacalilao where well No. 91 dropped from 5000 barrels to 2000 barrels because of salt water, and No. 145 was pinched from 4000 barrels to 1000 barrels.

California Production Up To 663,000 Barrels

Inglewood daily average past week was 82,000 barrels with peak Friday at 85,000 barrels

By W. E. Green
Staff Representative

Los Angeles, Calif.—The daily average production of the California fields the past week was up 19,500 barrels to a total of 663,000, which is an increase of about 32,000 barrels in three weeks. The increased production is light oil, coming largely from the new Inglewood field in the Baldwin Hills just outside of the Los Angeles city limits. Three weeks ago, it was predicted that Inglewood's peak would not exceed 75,000 barrels, but the peak of last week was 85,000 barrels, and not many now care to guess how much higher it will go.

May Go Higher

There is a feeling in well informed circles that Inglewood may reach 90,000 or even 100,000 barrels a day within the next two weeks, but the lower figure is the one most favored. Only forty wells were drilling Saturday, and less than half of this number are located in territory which can be expected to furnish large wells. The wells in the field more than three weeks old are declining at the approximate rate of at least 2000 barrels a day for the week. It will require several wells a week to offset this decline.

Eighty wells are now on production in this field with a majority of them producing from 1000 to 1300 feet of pay. Most of the best wells come in for around 1000 barrels a day or less and during the first several days of their life, show marked increases until in many instances the daily production per well reaches 2500 to 3500 barrels a day, and in a few instances as much as 4000 barrels. Then the decline sets in after the well has been flowing three weeks. The decline has been slow at first. None of the wells have been completed long enough to make an estimate worth very much, as those making the figures must guess in the dark.

Building Pipe Lines

Four of the larger companies operating in the field are taking steps to provide plenty of pipe lines. The Standard has been operating an eight-inch line from the field to its refinery at El Segundo for some time and at this time a six-inch line is being laid paralleling the eight-inch. This new line should be receiving oil in another two weeks. The Shell Company is laying a six-inch line from Inglewood field to connect with its line that serves the Torrance field. Pan American is laying a six-inch line from the field to connect with its 10-inch line that is about completed and which will run from Los Angeles harbor to Kern County. The Associated is now building a six-inch line from the field to Watson, a distance of about 13 miles. This line will be completed sometime in July.

Gravity of Oil

The gravity of the oil produced at Inglewood has an average of between 22 and 2 3degrees, with the average showing a tendency to increase as the large wells are being brought in with higher gravities. The Standard's L. A. Investment 16 which came in with a gravity of about 23 or 24 has increased to 26.9, making it the highest gravity well in the field. The completions last week ranged from 15 to 25 gravity, but the lower gravity mentioned was caused by cut oil, or water. At least one large refinery in the Los Angeles district is running around 30,000 barrels of the Inglewood crude each day, mixing it in with other Los Angeles Basin crudes, as the gasoline content is considered high enough to justify running through the stills with other gasoline content crudes. The gasoline content of Inglewood crude ranges from 18 to 20 per cent.

The Inglewood crude is also valuable for its lube content, being suitable for making cold test oils. This is especially true of the low gravity coming from the wells below 2000 feet in the field.

Deeper Sand at Dominguez

There was much interest last week in Marland's No. 7 test in the Dominguez field. The well was drilled to a total depth of 5542 feet and a string of casing was cemented at 5502 feet. Cores from 5507 to 5542 feet showed much oil sand, the sand being better nearer the bottom and the bit was stopped while it was still in the oil sand. The hole was bailed down and let stand a day, but salt water was coming in from somewhere, the point not yet determined. On Friday, the top of the water was at 2250 while top of oil standing in the hole was at 1200 feet. This gives the hole 1050 feet of oil. Tubing is being pulled and it is probable that recementing job will be necessary.

Geologists Win

But the Marland test has proved conclusively that there is a deeper sand in the Dominguez, bearing out the contention of the geological departments of the Associated, Shell and Union. If California was not blessed(?) with so much production, the Shell, Union and Asosciated would be drilling for the deeper sand right now. As it is, they are willing to wait, as they feel that the oil will stay there and not run away. It probably will be needed worse next year than now.

Another Real Deep One

The E. J. Miley test at Rosecrans, has reached a total depth of about 7080 feet and it looks like Miley is going after another depth record. But from the standpoint of an oil well, the hole so far has shown up as a total loss. It is understood that Miley will continue down, using a three-inch drilling stem from now on. He probably will keep going until he runs into real troubles.

With 35,000 barrels of heavy oil shut in throughout the state, there were indications late last week that other companies might soon close in some more production, where they can protect their lines. If all wells were open in the state, the California daily production would be very close to 700,000 barrels a day. And indications are that the state's production will continue around 600,000 barrels for the rest of the year, after Inglewood settles down. It is hardly possible that more than 50,000 barrels daily production can be or will be shut in.

Drilling Quiets Down

Drilling activity in the older fields is very quiet, although several wells are drilling in the Ventura Avenue field and also in Kern County in Section 19 and 20. The Pacific Oil Company last week completed a good well in Section 19 and is drilling several other wells. The Federal Drilling Company well in Section 20 started this new work and there are now 17 derricks in this general area where there were but two two months ago.

Los Angeles Shipments

Los Angeles, Calif.—Three cargoes of fuel oil left for Buenos Aires and one cargo of gasoline went to London. Other foreign shipments went to Pacific foreign. Record of shipments out of Los Angeles Harbor of crude oil and other petroleum products past two weeks in barrels follows:

	Past Week	Prev. Week
Tankers departed	33	32
Total crude moved	1,247,528	1,239,512
Total fuel moved	705,770	674,699
Total gasoline moved	467,543	281,660
Total Diesel moved	.....	.....
Total kerosene moved	155,700	.....
Crude, Pacific domestic	836,563	751,756
Fuel, Pacific domestic	188,611	288,624
Gasoline, Pacific domestic	.....	136,214
Crude, Atlantic domestic	300,525	377,756
Gasoline, Atlantic domestic	367,543	377,756
Crude, foreign	110,440	110,000
Fuel, foreign	517,159	386,075
Gasoline, foreign	100,000	.....
Kerosene foreign	155,700	.....

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Lake Charles Producer Has Much Water With Oil

Lake Charles, La.—Vacuum Oil Company's Miller No. 3, located 694 feet west and 300 feet north of the southeast corner of the northwest quarter of Section 9-10-9 of the Lake Charles field, came in on June 25 with an initial production estimated at 2500 barrels of fluid, 40 per cent oil and 60 per cent salt water. It is about a half mile southwest from the Lake Charles discovery well, which was completed by the Vacuum Oil Company on September 9, 1924, with an initial production of more than 5000 barrels of clean pipe line oil per day. Miller No. 3 was finished at a total depth of approximately 4400 feet; the discovery well was completed in eighteen feet of sand at a total depth of 3878 feet. The discovery well has been flowing steadily for nearly ten months and efforts are being made to clean it out and revive its flow.

The Vacuum Oil Company, operating with the Gulf Production Company as a silent partner, has drilled eight or ten wells on a block of several thousand acres near Lockport, in the subquhar No. 1, also drilled on the Vaccommercial wells have been brought in. Miller No. 2, drilled at a location about 225 yards from the discovery well, blew out as a heavy gasser from ten feet of sand at a total depth of 4364 feet; and the hole cratered and was lost. Farquhar No. 1, also drilled on the Vacuum-Gulf block, was abandoned as junked at a depth of 2465 feet, after flowing for a short time at the rate of 2000 barrels of fluid per day, 85 per cent salt water and 15 per cent oil.

Drilling is now in progress at a depth of approximately 4000 feet in the Vacuum Oil Company's Phoenix-Noel B-1, and drilling may be begun within the next few days in Phoenix C-1.

Another Well at Sweet Lake

It is said that the Pure Oil Company will begin operations soon in another well on its Sweet Lake block, the new location to be in Section 12-13s-8w, near its Sweet Lake discovery gasser which was brought in on June 7 with a heavy flow of gas from a total depth of 4502 feet. The well blew in unexpectedly with the drill stem still in the hole, and within eight hours the flow of gas and sand had cut great holes in all three strings of casing, making it impossible to bring the well under control, which resulted in its loss by cratering.

It is said that the Pure Oil Company has ordered a string of heavy 8¼-inch casing which will be set to afford a test of an oil-bearing sand logged at a total depth of approximately 4220 feet in its Sallier No. 1, another promising wildcat operation located in Section 13-10s-11w, about 22 miles west of Lake Charles.

Pay Sands of Smackover Field Now Known by Real Names

El Dorado, Ark.—W. E. Hopper, president of the Shreveport Geological Society, made public last week a report submitted by a committee of geologists appointed to identify and suggest a more satisfactory nomenclature for the several producing sands at Smackover. There has been considerable confusion among operators regarding the correct names of the different sands which yield oil and gas at Smackover, and the society has assumed the responsibility of suggesting for general use a list of names which will be satisfactory, both from a geological and a popular standpoint.

The newly found third oil-bearing sand at 2600 feet has been identified as of the Blossom formation.

President Hopper's announcement is as follows:

"These names have been decided upon after considerable study by an especially appointed committee of geologists who are familiar with conditions in Smackover. * * * All the names here applied, except the Graves sand, have been previously used in geological publications, and all these names, without exception, are now more or less generally used by local geologists and operators.

"Because of the failure of many, however, to unite on the same names for particular sands, the need has arisen for a recognized and impartial organization to decide upon and publish a definite list of names which it is hoped will at once replace such confusing and uncertain geological terms as '2000-foot,' '2400-foot' and '2600-foot' sands.

"The names decided upon are in part geological and in part farm names. As there remains much geological work to be done on the basis of fossils, or paleontological correlations, it is understood that these names will probably not be final; but they meet a need of greater clarity among geologists, operators. and writers for oil and gas publications, and afford an opportunity for their concerted action to avoid further confusion.

"This list covers the producing formations of the Smackover field; it does not differentiate, however, the separate sands of slightly different depths which occur within the formations named. A sand may produce from the top in one location, but from the bottom in another location; these two horizons may be so close together that they belong to the same sand formation, and it is impracticable to separate them by different names. Thus, the Meakin sand includes at least two slightly different producing horizons."

The Shreveport Geological Society, complying with requests of members of the United States Geological Society, Oklahoma geologists, and others, through a committee of which Henry G. Schneider is chairman, has named the producing sands of the Smackover field as follows:

Nacatoch Sand—This is the first sand, found at about 2000 feet. It produces both oil and gas throughout the entire Smackover field. The largest production is in the eastern part of the field.

Meakin Sand—This sand has been known as the "2200-foot sand," and also as the "Louann sand." The name Primm was applied to the upper part of this sand in the Engineering Report on Smackover Oil and Gas Field, published in August, 1924, by the United States Bureau of Mines. The Meakin sand produces both oil and gas in the western part of the field and only gas in the eastern part, with the exception of five wells completed as small oil wells. The maximum production of these wells in the eastern part of the field is 100 barrels.

Graves Sand—This is known as the "2400-foot" sand. It produces salt water flows in the western part and oil in the eastern part of the field.

Blossom Sand—This is known as the "2600-foot" sand. It has small production scattered through the western part of the field, with maximum production of 100 barrels. One well drilled in the eastern part of the field was completed with an initial production of 1500 barrels. Three gas wells have been completed in this sand in the eastern part of the field.

Woodbine Sand—This sand is found from 2750 to 2900 feet. This lowest of Smackover sands has no production to date. It has not been tested in the eastern part of the field.

In order to avoid further confusion and to establish general usage by geologists, operators, writers and others, the Shreveport Geological Society would appreciate the co-operation of all concerned by using the new terms.

Graves Sand Declining

The effect of the discovery of the Blossom sand reservoir at Smackover is not yet apparent in production figures, as production from the Graves sand continued to fall throughout the week, until bolstered up at the weekend by the completion of two gushers by the Roxana Petroleum Corporation and The Texas Company. Both of these wells were finished in the Graves sand, and both are located along the northeastern boundary of the deep sand production. The Roxana's Williams No. 4, located in the southeast corner of the NW¼ SE¼ of Section 34-15-15, is credited with an initial flow of 15,000 barrels of pipe line oil per day from seven feet of sand at a total depth of 2372 feet. The Texas Company's No. 5 Johnson, located in Lot 1, and near the center of the north line of Section 3-16-15, is flowing at the rate of 7000 barrels of oil per day from a sand at 2375-82 feet.

The Texas Company's Alphin No. 7, finished in the Blossom sand, was brought in last week as a 600-barrel well from a depth of 2542-49 feet. The well is located in the southeast quarter of Section 3-16-15, within one-half mile of the eastern boundary of the field. Bailey & Murray's Rhoten B-2, located near the center of the west line of the S½ SW¼ NW¼ of Section 32-15-15, blew in early last week as a huge gasser, spraying oil, from the Blossom sand at a total depth of 2575 feet.

The Houston Oil Company's No. 3 Reynolds, located near the southwest corner of Section 27-15-15, blew in recently with an initial flow estimated at 10,000,000 cubic feet of gas and a light spray of oil from seven feet of sand at a total depth of 2562 feet, Blossom horizon. This serves as a northeastern extension of the deep sand pay. Deep sand production also was extended to the southwest by the completion of the Natural Gas & Petroleum Company's Murphy A-4, in the northeast quarter of Section 17-16-15, Union County, which is yielding 400 barrels of oil per day, by swabbing, from ten feet of sand at a total depth of 2508 feet.

It is reported that Stock and others have cored into a promising sand at 2535 feet in their deep test now being drilled on the Polk & Ezell lease, in Section 18-17-14, of the El Dorado East Field, sometimes called the Calion field.

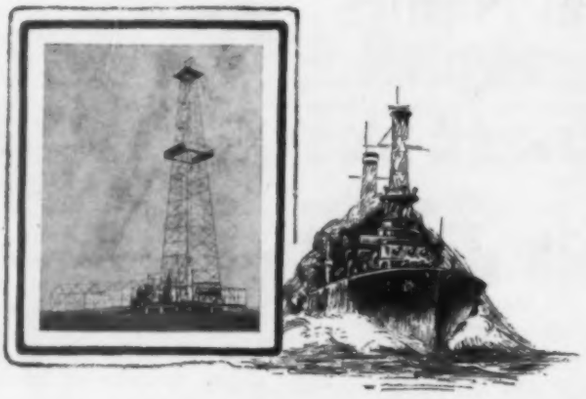
Wildcats

Phillips et al have drilled the six-inch plug and are preparing to make a test at around 2755 feet in their wildcat being drilled on the property of the Davis Loan & Investment Company, in Section 14-18-21, Columbia County. The Buffalo Oil Company's Morgan, located in Section 22-15-16, near the town of Stephens and about two miles east of the Stephens oil field, promises to make a fairly good pumper from eleven feet of oil sand at a total depth of 2225 feet.

Tarver and others have begun drilling in their Swafford wildcat, in Section 14-11-25, Hempstead County.

Open Heavy Oil Wells

Los Angeles, Calif.—The Shell Company is opening up about sixty line wells at Coalinga giving the company fifteen hundred daily additional production. The Coalinga crude is heavy, with good lube content. This action came as surprise as the Shell had been expected to close in further production instead of opening wells that had been closed.



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High Gravity Producer In Nocona Shallow Field

Wichita Falls, Texas.—The Nocona shallow oil and gas field in upper Montague County scored its first high gravity oil producer last week when the Humphreys Corporation's G. W. Hinton 1 widened the oil producing area three-quarters of a mile to the west with a new oil pay at 1790-1844 feet making about 50 barrels of pipe line oil testing 41.5 gravity at a temperature of 78 degrees. This discovery of light oil production will have a stimulating effect on field work in the Nocona area, as most of the 14 completed shallow oil pumpers in the field have been standing idle since completion because of the two major pipe line companies having lines in the field refusing to handle the low grade oil, which now ranges from 22.5 to 41.5 gravity. The trend of field work will also shift to the west of the original oil producing area by reason of the ready market for all the high gravity oil that can be produced.

The discovery well of this high gravity oil area is flowing by heads at regular intervals from sandy-lime pay credited with having a thickness of about 54 feet, and pipe line connections have been furnished by the Sinclair Pipe Line Company. The nearest oil production is the Humphreys Corporation's W. W. Jones 1, Wm. Donoho survey, which is pumping about 60 barrels of 31 gravity oil from sand at 830-76 feet.

The Nocona field development has been greatly retarded by the quality of the oil found in most of the completed wells, which have a combined daily output of approximately 650 barrels from oil sands ranging in depth from 821 to 1844 feet. The field has not lived up to the expectations of companies and individuals that participated in the lease play given upper Montague County several years ago when lease prices ranged from $25 to $400 per acre on strictly wildcat stuff. A market for the production coming from wells making low grade heavy oil may be provided before the close of summer, as it is known that the Magnolia Petroleum Company is considering the extension of a pipe line from its main trunk line coming south from Oklahoma via the southwest part of Montague County. This line is handling heavy oils from Southern Oklahoma, and could make the connection with 20 miles of pipe.

The Big Indian Oil & Development Company, discoverers of a small high gravity oil producer from sand at 3519-29 feet in Cooke County, has a second test nearing the pay level, with drilling continuing below the 3110 foot level early this week. This second test is less than one mile north of the discovery well, and on the F. Lester farm, lot 24, Fannin County School Lands. The Godley Oil & Gas Company and others' wildcat test on the M. E. Florence land, located several miles from the Big Indian discovery well, is reported to have reached a depth of 3560 feet without showing for a producer.

Light Oil Production Is Falling, But—There Is Room to Fall

(*Continued from page 26*)

comprising this district do not produce oil qualified for this price. The new price schedule enables The Texas Company to offer its present customers and prospective ones as good a price as can be had from other major crude purchasing agencies in the East Central Texas fault zone, as both Prairie and Sinclair are buying on the Mid-Continent district gravity schedule in this section of the state, with $2.00 as the minimum price per barrel. The latter two purchasing agencies do not post a separate price schedule for the East Central Texas fault zone, and have not been contenders for the available high grade of oil in the Hilburn and Currie fields.

The producers of the premium grade of oil in the above two fields have been fully aware that a connection with Prairie or Sinclair would result in the top Mid-Continent price being obtained for their production, instead of the flat price of $2.00 on all grades posted by Gulf, Humble, Magnolia and formerly by The Texas Company. Only about 1600 barrels of daily production can participate in this new price schedule, with 1400 barrels at Currie and the remainder is coming from two wells in the new fault line field, which is producing 44 gravity oil. The Texas Company is the only buyer in the new pool at present, and is only taking a small portion of the daily output at Currie, but several new connections may be available with the new price in effect.

Although the Texas Company is comfortably supplied with low and high gravity crudes, the heavy inroads made on reserve stocks since early spring, in the face of large purchases of producing properties in North and Central Texas, has caused the company to become one of the most active in the open crude market lately. New connections are being solicited whenever within convenient reach of established gathering systems, and assistance has been given other major companies when burdened with temporary flush production, as was the case with Gulf in lower Archer County. Gulf built up a big flush production from its leases in the Harmel field, Archer County, early this summer, and diverted several thousand barrels daily to The Texas Company for a period of 90 days rather than to increase pipe line facilities at a great expense for this comparatively short lived flush period.

Humble and Prairie are reported to have made agreement to exchange slightly more than a half million barrels of Texas crude over the balance of the summer, and Humble is now engaged in connecting with Prairie's leases and gathering systems in the Breckenridge-Ranger district and in Brown County, while Prairie will receive a like amount of Humble's production and purchased oil in the Mexia-Corsicana district. The terms of this agreement have not been made public, other than that Prairie has arranged to supply a big refinery customer with a uniform grade of crude, while Humble segregates the various grades of crude obtained in the Ranger-Breckenridge district and other sections of Central West Texas in making crude deliveries to its crude customers on the East Coast. This deal has no particular bearing on the crude situation other than that more efforts are being spent toward satisfying the particular needs of large crude customers.

Magnolia Buys Production

Magnolia Petroleum Company has been taking a production gauge of a number of different properties in North Texas lately, with intentions of making purchases if price demands stack up with actual production, and last week consummated a deal for the purchase of part of the Archer-Young County holdings of the Murchison-Fain Oil Company for a cash consideration of $1,150,000. These properties include about 1550 barrels of semi-shallow production from 66 wells, and were bought on a basis of about $7.40 per barrel. Magnolia is in the market for additional high gravity oil production to replenish its diminishing crude supply. Humble continues to add to its high gravity oil production in North Texas by purchasing producing properties, and last week paid $200,000 for Pois-Britain et al's lease in the K-M-A field, and $162,000 cash for J. W. Dyson-C, L. Sloan et al's wildcat producer and small lease in Wilbarger County. Humble also assumed an oil payment obligation outstanding on this lease for the amount of $20,000.

Premiums on North Texas crude have remained stationary over the past several weeks, with bonuses ranging from 15 to 25 cents, and further increases are not threatening. As has been stated in these columns previously, the average independent refiner in North Texas is comfortably supplied with daily crude runs, and an occasional demand for a greater supply can be had from the spot market without difficulty at the above premiums. The failure of refined markets to keep moving at the pace set early in June has retarded the activities of the refiners in the crude market, and purchases of crude are being confined to current needs. Gasoline prices have held up against a slackened demand, however, and the buying flurry that usually accompanies the heavy consumption period on Independence Day is expected to be stronger than usual this year, owing to the holiday falling on Saturday. Another buying lull in the gasoline market is expected by the refiners shortly after the double holiday demand has been satisfied. Fuel oil has been dragging on the market and lower prices are now facing the manufacturers.

California Weaker

The California market for everything except gasoline was slightly weaker last week, with a slightly depressed demand for crude. None of the larger companies are very anxious for new crude connections, except the Pan-American. The Shell Company is more than willing to take less crude. The Standard will take all offered, but would not be adverse to reducing runs slightly for a month or two. The Pan-American continues to pay 18 cents a barrel premium for desirable oil, and can take care of all offered.

Fuel oil is very weak and growing weaker. Eastern concerns can come to the West Coast this summer and make some fair contracts for immediate moving if they want the fuel and have plenty of storage space to care for it.

Gasoline is very strong, with one financial writer in a local newspaper predicting an increase in the price. But not many oil men expect any increase until crude prices advance. Shipments of gasoline through the canal to Atlantic domestic points and Atlantic foreign ports are showing heavy increase over last year. But stocks of gasoline on the West Coast can stand very heavy shipments and still have plenty on hand. West Coast refiners plan to do a lot of cracking next year, and they are now making arrangements to that end. Shell Company is now installing six new cracking stills at its refinery in the Los Angeles district.

Natural gasoline is slightly weaker, due to increased production. Wells at Inglewood have considerable gas, and several plants are being erected to run the gas. Ventura Avenue field is also furnishing plenty of gas, one late completion making around 30,000,000 cubic feet a day.

Merriam-Findeiss Has Receiver Appointed

Wichita, Kan.—Judge A. M. Ebright has just appointed Robert E. Isreal as receiver for the Merriam-Findeiss Oil Company, a corporation which has been carrying on extensive exploration in the state for the past three years.

Disagreements among officers, directors and stockholders was given as the reason for the application for receivership. It was stated that the company had lost approximately $149,000 during the past three years.

CRUDE OIL PRICE QUOTATIONS

Current Postings

EASTERN STATES

	July 1 1925	July 5 1924
New York Transit	$3.90	$3.75
Bradford (Pa.)	3.90	3.75
Gains	3.45	...
Other Pa. Grades	3.75	3.25
Cabel	2.35	1.70
Ragland	1.30	1.00
Corning	2.05	1.90
Somerset, medium	2.45	1.80
Somerset, light	2.60	2.00

CENTRAL STATES

Illinois	$2.02	$2.07
Idniana	2.03	2.08
North Lima	2.23	2.28
South Lima	2.23	2.28
Plymouth	1.55	1.45
Princeton	2.02	2.07
Waterloo	1.10	1.55
Wooster	2.15	2.00

WESTERN KENTUCKY

Posted by Indian Refining Company for crude from Allen, Warren, Franklin, Davies, Barren, Cumberland and Monroe Counties

36 and above	2.05	...
33 to 35.9	1.95	...
32.9 and below	1.85	...

CALIFORNIA

(Crude oil prices at well)

Los Angeles and Orange Counties

14 to 19.9 gravity	$1.25	$1.00
20 to 20.9 gravity	1.27	1.01
21 to 21.9 gravity	1.30	1.02
22 to 22.9 gravity	1.33	1.03
23 to 23.9 gravity	1.36	1.05
24 to 24.9 gravity	1.40	1.07
25 to 25.9 gravity	1.44	1.10
26 to 26.9 gravity	1.48	1.13
27 to 27.9 gravity	1.52	1.16
28 to 28.9 gravity	1.56	1.19
29 to 29.9 gravity	1.60	1.22
30 to 30.9 gravity	1.64	1.25
31 to 31.9 gravity	1.68	1.28
32 to 32.9 gravity	1.72	1.31
33 to 33.9 gravity	1.76	1.34
34 to 34.9 gravity	1.80	1.37
35 gravity and above	1.85	1.40
Fuel Oil	1.65	1.40

Rosecrans Field

36 to 36.9 gravity	$1.92
37 to 37.9 gravity	2.00
38 to 38.9 gravity	2.08
39 to 39.9 gravity	2.16
40 to 40.9 gravity	2.24
41 to 41.9 gravity	2.32
42 and above	2.40

MID-CONTINENT

(Prairie Prices)

Below 30 gravity	1.35	1.25
30 to 32.9 gravity	1.55	1.45
33 to 35.9 gravity	1.80	1.75
36 to 38.9 gravity	2.00	2.00
39 to 41.9 gravity	2.25	2.25
42 and above	2.35	2.25

(Sinclair Prices)

Below 30 gravity	1.35	...
30 to 32.9 gravity	1.55	...
33 to 35.9 gravity	1.80	...
36 to 38.9 gravity	1.95	...
39 to 41.5 gravity	2.25	...
41.6 and above	2.35	...

	July 1 1925	July 5 1924

(Texas Company Prices)

Below 30 gravity	1.35	...
30 to 32.9 gravity	1.55	...
33 to 35.9 gravity	1.80	...
36 to 38.9 gravity	2.00	...
39 to 41.5 gravity	2.25	...
42 and above	2.35	...

(Magnolia Petroleum Co.)

Under 28 gravity	1.00	...
28 to 30.9 gravity	1.35	...
31 to 32.9 gravity	1.55	...
33 to 35.9 gravity	1.80	...
36 to 38.9 gravity	2.00	...
39 to 41.9 gravity	2.25	...
42 and above	2.35	...
Corsicana, light	2.00	...
Corsicana, heavy	1.00	...
Mexia	2.00	...
Thrall	1.00	...
Wortham	2.00	...

NORTH CENTRAL TEXAS

(Humble Oil & Refining Co.)

Corsicana, light (Powell)	2.00	2.00
Mexia	2.00	2.00
Currie	2.00	2.25
Richland	2.00	...
Wortham	2.00	...

(The Texas Company)

42 and above	2.25	...

(All other grades same as Humble)

RANGER

(Humble Oil & Ref. Co.)

30 and below	$1.35	...
30 to 32.9	1.55	...
33 to 35.9	1.80	...
36 to 38.9	2.00	...
39 to 41.9	2.25	...
42 and above	2.35	...

WICHITA AND ARCHER COUNTIES

(Texas)

(Humble Oil & Ref. Co.)

30 and below	1.35	...
30 to 32.9	1.55	...
33 to 35.9	1.80	...
36 to 38.9	2.00	...
39 to 41.9	2.25	...
42 and above	2.35	...

Moran Crude

30 and below	1.35	...
30 to 32.9	1.55	...
33 to 35.9	1.80	...
36 and above	2.00	...
Lytton Springs (Lockhart)	2.00	...

SOUTH TEXAS

Mirando (Texpata)	1.00	.80
Mirando (Magnolia)	1.00	...

SOMERSET

(Grayburg Pipe Line Company)

30 and below	1.35	1.15
30 to 32.9	1.55	1.15
33 to 35.9	1.80	1.40
36 to 38.9	2.00	1.60
39 to 41.9	2.25	1.75
42 and above	2.35	1.75

GULF COAST

Grade "A"	1.75	2.00
Grade "B" at Blue Ridge, Hull and Pierce Junction	1.50	1.70

Big Lake (Reagan County)

36 to 38.9	$2.00	...
39 and above	2.25	...

LULING

Based on Contract	1.15	.75
Lockhart	2.00	...

	July 1 1925	July 5 1924

LOUISIANA-ARKANSAS

Caddo

38 gravity and above	2.05	1.85
35 to 37.9 gravity	1.95	1.75
32 to 34.9 gravity	1.85	1.65
Below 32 gravity	1.70	1.50

Homer

35 gravity and above	1.80	1.85
33 to 34.9 gravity	1.70	1.75
31 to 32.9 gravity	1.60	1.65
Below 31 gravity	1.45	1.50

COTTON VALLEY

All grades	1.80	...

Haynesville

33 gravity and above	1.70	1.75
Below 33 gravity	1.60	1.65

Bull Bayou

38 gravity and above	1.85	1.80
35 gravity to 37.9	1.70	1.65
32 to 34.9 gravity	1.55	1.50
De Soto crude	1.90	1.85
Crichton	1.70	1.65
Bellevue	1.75	1.75
Jennings	1.75	2.00
Vinton	1.75	2.00
Edgerly crude	1.75	1.80

Smackover

Louisiana, Atlantic, Shreveport-Eldorado

28 and above	1.35	...
27 to 27.9	1.30	...
26 to 26.9	1.25	...
25 to 25.9	1.20	...
24 to 24.9	1.10	...
Below 24	.90	...

The Texas Company

26 gravity and above	1.30	1.20
24 to 25.9	1.00	...
Below 24	.80	.85

Standard Gulf

27 and above	1.30	...
26 to 26.9	1.25	...
25 to 25.9	1.20	...
24 to 24.9	1.10	...
Below 24	.80	...

El Dorado

33 gravity and above	1.70	1.85
Below 33 gravity	1.60	1.75
East Field (Calion)	.80	1.00

Stephens District

26 gravity and above	1.60	...
Below 26 gravity	1.40	...

WYOMING-MONTANA

Wyoming

Byron	2.25	...
Ferris	1.30	...
Elk Basin	2.15	1.95
Grass Creek	2.15	1.95
Rock Creek	2.00	1.70
Lost Soldier	1.35	...
Lance Creek	2.15	1.90
Mule Creek	1.25	...
Notches	.65	...
Big Muddy	2.00	1.50
Salt Creek	2.00	1.60
Osage	2.15	1.90
Hamilton Dome	1.80	1.55
Pilot Butte	1.75	1.25
Torchlight-Greybull	2.15	1.90
Lander	.85	.70

Montana

Sunburst	1.40	1.05
Cat Creek	2.15	1.95

NEW MEXICO

Hogback	2.20	...

CANADIAN CRUDE

Oil Springs	2.70	2.73
Petrolia	2.68	2.68

*Bounty on Canadian crude is ¾ cents per gallon, or 26¼ cents per barrel.

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Say you saw it in The Oil Weekly

AVERAGE DAILY PRODUCTION FOR U.S.

Mountain States

Pipe line runs from all the fields in the Rocky Mountains for the past week and previous week were as follows:

WYOMING

	Past Week	Prev. Week
Salt Creek	53,190	48,440
Lost Soldier	4,750	4,360
Grass Creek	4,750	4,675
Big Muddy	3,320	3,265
Rock Creek	3,000	3,025
Teapot	1 645	2,140
Poison Spider	1,125	1,100
Mule Creek	825	820
Elk Basin	815	850
Lance Creek	810	390
Hamilton Dome	700	435
Lander	350	315
Osage	275	450
Ferris	165	150
Greybull	130	100
Wyoming Totals	75,950	70,515

COLORADO

Craig	700	725
Florence	245	250
Fort Collins	165	420
Tow Creek	120	125
Rangely	100	110
Boulder	30	35
Colorado Totals	1 360	1,665

MONTANA

Kevin-Sunburst	8,785	6,285
Cat Creek	3,640	3,270
Montana Totals	12,425	9,555

NEW MEXICO

Artesia	1,500	1,280
Hogback	535	520
Rattlesnake	460	335
New Mexico Totals	2,495	2,135
Miscellaneous	200	200
Grand Totals	92,430	84,070

Kansas

Greenwood	28,290	28,540
Rainbow Bend	18,980	19,760
Eldorado	13,980	14,000
Elbing and Peabody	5 620	5,635
Augusta and Douglas	3,130	3,140
Fox-Bush	2,930	2,935
Blankenship	2,340	2,345
Florence and Covert	1,970	1,980
Other fields	21,790	21,945
Totals	99,030	100,290

California

Los Angeles, Calif., June 17.—Daily average production of the California fields the past week, compared with the previous week, with number of producing wells in several fields, was about as follows:

	Past Week	No. Prod. Wells	Prev. Week
Long Beach	108 000	520	108,500
Inglewood	82,000	80	63,000
Santa Fe Springs	53,000	343	53,500
Huntington Beach	47,000	308	45,000
Torrance	38,000	567	38,000
Dominguez	32,000	56	33,000
Rosecrans	23,000	55	20,500
Others	280,000		282,000
Totals	663 000		643,500

Oklahoma

	Past Week	Prev. Week
Tonkawa	57,835	58,805
Burbank	57,560	57,990
Bristow	45,000	45 100
Cromwell	37 940	38,690
Osage (outside Burbank)	35,760	35,875
Okmulgee	25,050	25,170
Cushing	20,900	20,980
Wewoka	20,890	20,920
Gilcrease-Papoose	18,700	18,750
Hewitt	14,790	14,800
Garber	11,500	11,420
Otoe	7 730	7,750
Stroud	4,700	4,720
Braman	4,500	4,510
Other fields	83,920	83,765
Totals	446,125	449,245

Louisiana

Haynesville	13,315	13 075
Cotton Valley	11,325	11,600
Caddo Light	9,150	9,150
Vinton	7,115	7,325
Homer	7,100	6,500
Bull Bayou	4,110	3,990
Bellevue	3,375	3,315
Caddo Heavy	2,210	2 375
Evangeline	840	900
Elm Grove	605	725
Edgerly	550	550
Lockport (Lake Charles)	235	210
Anse La Butte	10	20
Totals	58,940	59,735

Arkansas

Smackover Heavy	238,250	282,080
Smackover Light	28,600	29 340
El Dorado	8,945	8,215
Stephens	1,835	1,850
Irma	1,545	1,400
Totals	279,175	322,885

Texas

NORTH-CENTRAL

	Past Week	Prev. Week
Corsicana-Powell	49,180	50,835
Wortham	35,750	38,000
Archer County	38,200	38,320
Big Lake-Reagan County	30,000	30,180
Mexia	19,370	20,100
Stephens County	17,500	17,500
Electra	17,008	17 095
Burkburnett	15,700	14,735
Young County	10,600	10,615
Eastland County	10,500	10,415
So. Vernon-Wilbarger Co.	9,000	8,995
Richland	4,500	4,450
K-M-A and Iowa Park	3,900	3,885
Callahan County	3,750	3 785
Moran-Shackelford County	3,720	3,725
Panhandle District	3,625	3,625
Brown County	2,180	2,175
Mitchell County	2,285	2,290
Currie County	1,350	1,375
Palo Pinto County	560	560
Petrolia-Clay County	480	475
Montague County	170	170
Throckmorton County	90	85
Coleman County	90	90
Scurry County	75	75
Thrall-Williamson County	55	55
Jack County	35	35
Totals	279,665	283,645

GULF COAST

Hull	20 025	20,050
South Liberty	17,925	18,050
Orange	12,725	13,575
West Columbia	12,130	12,175
Goose Creek	10,915	11,075
Humble	4,830	4,400
Sour Lake	4,200	4,260
Saratoga	1,705	1,740
Batson	1,350	1,375
Damon Mound	1,265	1,200
Blue Ridge	1,055	1,080
Spindle Top	1,070	1,100
Big Creek	570	475
High Island	550	625
Pierce Junction	490	335
Barbers Hill	95	130
Nacogdoches	30	30
Dayton	50	..
Markham	15	75
Total	90,995	91,750
Luling	24,000	24 895
Mirando	9,600	9,600
Lockhart (Lytton Springs)	12,285	11,610
Somerset	3,055	2,870
Miscellaneous South Texas	675	670
Totals	49,615	49,645
Totals Texas	420,275	425,040

Condensed U. S. Production for Twelve Months

(Stated in Barrels)

This table is compiled each week by The OIL WEEKLY, and shows daily production average for each state or section.

Daily average for month	*Mid-Continent	North Central Texas	Texas Coastal	Texas Total	Kansas	Okla.	Louisiana	Eastern States	Wyo. Mont. Colo. New Mexico	Calif.	Ark.	Total
March	762,684	284,874	78,567	388,221	69,864	407,946	55,783	97,800	128,352	650,790	119,869	1,917,023
April	777,590	276,595	76,755	380,005	71,015	429,980	54,740	101,250	127,700	649,825	128,750	1,943,270
May	763,320	267,475	74,175	374,915	71,490	424,355	60,655	103,800	127,770	640,930	148,630	1,952,545
June	799,230	260,785	74,335	375,310	74,265	464,175	62,660	105,750	125,735	628,400	157,165	1,993,465
July	815,830	254,665	75,445	378,365	81,545	479,620	63,855	107,175	124,305	620,175	148,655	2,003,695
August	861,640	254,520	75,700	377,045	85,765	521,355	62,595	107,000	123,895	619,200	142,740	2,037,890
September	886,650	253,243	76,953	366,197	86,758	546,647	62,162	107,622	117,345	611,500	131,343	2,029,580
October	855,823	247,222	75,713	359,861	86,884	521,717	62,493	106,600	107,270	605,060	123,235	1,972,902
November	851,733	248,467	71,648	369.621	86,031	517,237	66,117	106,375	91,205	594,000	119,893	1,950,478
December	873,344	267,065	65,437	385,410	88,065	518,213	59,602	106,875	83,472	606,875	111,402	1,959,917
January	906,160	334,305	65,065	448,900	88,390	483,465	56,520	106,200	78,435	602,600	106,280	1,970,350
February	861,130	292,796	63,885	405,195	88,790	479,545	56,825	105,125	87,710	599,375	106,085	1,927,680
March	839,200	301,795	83,800	434,410	84,965	452,440	58,030	100,550	90,900	605,775	112,425	1,939,520
April	836,110	294,040	94,215	435,035	84,360	457,710	57,700	98,250	91,845	602,800	209,840	2,037,545
May	835,350	295,695	100,205	447,080	93,610	446,040	60,945	101,140	91,492	609,200	419,770	2,269,280
June 6	847,275	291,870	98,110	442,240	100,895	454,510	60,625	103,400	89,340	632,500	436,910	2,320,420
June 13	843,445	289,200	97,200	439,930	101,675	452,570	60,610	104,000	84,070	631,000	360,880	2,234,735
June 20	833,170	283,645	91,750	425,040	100,280	449,245	59,735	103,800	92,430	643,500	322,885	2,196,915
June 27	815,820	279,665	90,995	420,275	90,030	446,125	58,940	103,500	84,070	663,000	279,175	2,145,115

*Includes North Central Texas, Kansas, Oklahoma.

NOTE—Wortham, Corsicana-Powell and Mexia production included in North Central Texas.

Premium Posted for High Gravity Central Texas Oil

Corsicana, Texas.——The high quality of the crude coming from the new oil field discovered early this month in the East Central Texas fault region between the old Richland and Currie fields, was directly responsible for the return of a premium on unusually high gravity crude in this district. The Texas Company is buying the oil produced by the two producers in this new field, and effective June 26, posted a price of $2.25 per barrel for all crude in the East Central Texas fault region testing 42 gravity and above. This new classification reaches all the production in the new pool, and most of the production in the Currie field, which is making about 1400 barrels daily. None of the other major purchasing agencies have adopted The Texas Company's new price schedule, although Prairie and Sinclair are both buying on the Mid-Continent district gravity scale, but are not contenders for crude in the new pool and the Currie field.

The new pool was discovered on June 10 by Barkley-Meadows' A. Hilburn 1 making 200 barrels 44.4 gravity oil from regular Woodbine sand at 2981-96 feet, and the discovery well is holding to 125 barrels daily. The second producer was brought in by W. A. Graves et al's V. H. Stubbs 1, and has increased to about 75 barrels daily since drilling to 2995 feet. The Sun Oil Company's A. Hilburn 2 and Hilburn 2-A are the next tests due for completion, and give promise of being producers by reason of logging the upper "key" formations at normal depths for production.

Another try for production in close vicinity of the famous wildcat well near Kosse, in Limestone County, is to be made shortly, and the E. L. Smith Oil Company has announced that it will drill in the southeast corner of the Jones tract, containing the short-lived gusher, or about 600 feet southeast of the well, which is still showing evidence of oil in the hole. The Jones discovery well blew in during the third week of August, 1922, after drilling to 3767 feet, with an estimated production of more than 20,000 barrels, but the oil flow was irregular, and the hole was finally junked after a great expense to its owners. The dry hole boom that followed this discovery proved one of the largest in the history of the oil industry.

COMPLETIONS FOR PAST WEEK IN U.S. FIELDS

Summarized Review of Field Results

State—	Completions This Week	Completions Last Week	Producers This Week	Producers Last Week	Gas Wells This Week	Gas Wells Last Week	Failures This Week	Failures Last Week	Initial Product'n This Week	Initial Product'n Last Week
Oklahoma	126	100	76	63	5	9	45	28	16,516	20,801
Kansas	35	34	20	15	..	..	15	19	5,601	3,128
Texas	70	130	55	83	4	3	11	44	13,935	8,264
Arkansas	36	58	32	50	2	..	2	8	42,725	51,445
Louisiana	10	12	9	6	..	2	1	4	3,055	260
Eastern States	156	178	87	124	40	29	29	25	1,128	1,903
Mountain States	23	28	19	23	..	1	4	4	4,220	1,815
California	32	35	31	35	..	..	1	..	30,610	20,045
Totals	488	375	329	399	51	44	108	132	117,790	115,661

NOTE—Following is the explanation of abbreviations, signs, etc., used in completion and wildcat reports: *—dry hole, abandoned well; ‡—salt water; †—junked and abandoned; ¶—million cubic feet of gas; abn—abandoned; bbls—barrels; b. s.—basic sediment; cas—casing; co—cleaning out; dk—derrick; dr—drilling; fsh—fishing; ft—feet; in—inches; lcn—location; m—milling N. S. E. W.—North, South, East, West; r—reaming; sd—shut down; sdtr—sidetracking; sp—spudding; sr—straight reaming; std—standardizing; sw—salt water; td—total depth; ur—under reaming; wo—workover; wosr—waiting on standard rig.

California

Company, Well, Location—	Initial Production Bbls.	Depth
Inglewood—		
Standard's L. A. Investment 1-12	2915	2570
L. A. Investment 1-13	1500	2540
L. A. Investment 1-15	1500	2629
L. A. Investment 1 16	1500	2651
Vickers 1-2, wo	2000	2550
Vickers 1-10	600	2570
Vickers 1-11	1950	2612
Vickers 1-12	2000	2635
Petroleum Securities' Cone 1, wo	600	2560
Cone 2, wo	600	2560
Cone 4, wo	1100	2598
Cone 9	480	2684
Associated's Vickers 12	400	2561
Vickers 14	120	2256
Vickers 17	1000	2608
Shell Co.'s Rindge 3	3425	2650
Wilshire's No. 1	*	....
Montebello—		
Standard's Howard & Smith 2	175	4265
Long Beach—		
Jim O'Donnell's No. 38.	350	4444
No. 39.	530	4454
H. A. Patton's Shore 1, wo	180	3685
Acme Pet.'s Dameron 4	400	4933
Rosecrans—		
Hercules Gaso. Co.'s Athens 2	475	4435
Union's Howard Park 13	800	4252
Barnsdall's Rosecrans 5	300	4533
Geo. F. Getty's No. 6	200	4387
Julian's Athens 3, wo	300	4392
Brea—		
Shell Co.'s Pico 3-A	290	4561
Hovey Hills—		
Formax Oil Co.'s 19, Sec. 36-32-23.	150	1213
Midway District—		
North American's No. 20, Sec. 30-31-24	1500	3860
Pacific Oil's No. 15, Sec. 19-31-24.	2250	4162
Sunset District—		
Standard's No. 59, Sec. 36-12-24.	120	2128
Ventura—		
Associated's No. 6, wo	900	4854

Texas

GULF COAST

Company, Well, Location—	Initial Production Bbls.	Depth
Batson—		
Dentser Oil Co. Trustee 11, wo	5	765
Paraffin Oil Co. Knight 41	5	475
Goose Creek—		
Gulf Coast Oil Corp. Gaillard 6	50	3000
Gulf Prod. Co. Wright A-16	75	2930
Hull—		
Gulf Prod. Co. Phoenix Dev. Co. wo	900	2270
Humble O. & R. Co. Hannah B-2..	*	4280
South Liberty—		
Humble O. & R. Co. Mitchell 1	*	4217
Pierce Junction—		
Snowden & McSweeney Cain 8, wo.	‡	3975
Big Creek—		
Gulf Prod. Co. Davis 22	1500	3040
Union Sulphur Co. Davis 25	‡	675
Davis 26	‡	660
Gulf Prod. Co. Davis 21	200	3100
Orange—		
Edgerly Pet. Co. Carbello 5, wo	75	2740
Gulf Prod. Co. Hayer Fee 14	2000	4680
High Island—		
The Sun Co. B. & O. 1	600	2197

NORTH-CENTRAL TEXAS

Company, Well, Location—	Initial Production Bbls.	Depth
Powell—		
Humble Oil Ref. Co. R. I. Kent 3.	20	1648
G. C. Kent 17	20	1620
Ramsey A-14	15	1640
Ramsey B-28	15	1652
W. Smith 8	25	1645
Roxana Pet. Co. W. Smith 6	55	1673
Bailey 2	30	1665
Wortham—		
Humble Oil & Ref. Co. L. Manning 8	190	2990

SOUTH LOUISIANA

Company, Well, Location—	Initial Production Bbls.	Depth
Vinton—		
Marrs McLean Gray 1, wo	50	1870
Seiss Oil Syndicate Green 9	80	2525
Lockport—		
Vacuum Gulf Oil Co. Miller 3	2500	4070

TEXAS MISCELLANEOUS

Company, Well, Location—	Initial Production Bbls.	Depth
Lockhart—		
The Texas Co.'s Beaty 1	200	....
The Texas Co.'s Beaty 2	500	....
The Texas Co.'s Beaty 3	350	....
The Gulf Production Co.'s M. L. Brewer 6	200	....
The Gulf Production Co.'s M. L. Brewer 7	150	....
The Gulf Production Co.'s A. T. Cardwell 2	500	....
Brownlee et al's Beaty 1	150	....
Magnolia Oil Co.'s Beaty 1	150	1432

Company, Well and Location	Initial Production Bbls.	Depth
Magnolia Oil Co.'s Beaty 2	300	1432
Randolph & Pope's Beaty 1	150	....
Mills Bennett's A. T. Cardwell 1	600	1426
A. T. Cardwell 2	250	1400
Mirando—		
Kitselman & St. Albans 16	150	....
Kitselman & St. Albans' 17	150	....
O. W. Killam's 3	250	....
O. W. Killam's 4	800	....

EAST TEXAS COMPLETIONS

Waskom Gas Field, Harrison County—		
Panola Oil & Gas Co.'s E. Harris 1, Dickerson survey	¶20	1950
State Line O. & G. Co.'s Waterman 2, Pollack Survey	¶15	1945
Total, 2 wells	¶35	

Arkansas

Stephens Field, Columbia County—		
Magnolia Pet. Co.'s Hammond 3 25-15-20	20	2105
Smackover Field, Ouachita County—		
Bailey & Murray's Rhoten B-2 32-15-15	¶20-400	2585
J. E. Crosby's Berry 8 33-15-15	1000	2390
Gulf Refining Co.'s Umstead A-13 33-15-15	1200	2364
Humble O. & R. Co.'s Laney 7 32-15-15	2700	2403
Owenwood Oil Corp.'s Snyder 7 34-15-16	3000	2376
Phillips Pet. Co.'s Joyce 9 33-15-15	6000	2445
Roxana Pet. Co.'s Williams 1, 34-15-15	2500	2381
Sinclair Oil Co.'s Berry 9 33-15-15	1200	2459
Standard Oil Co.'s Powell 4 34-15-15	500	2399
Sure Oil Corp's Hill 2 5-16-15	1000	2357
The Texas Co.'s Berry 10 33-15-15	2000	2385
Arkansas Fuel Oil Co.'s Collins 11 4-16-15	175	2193
Amerada Pet. Corp.'s Flenniken 9 6-16-15	5000	2375
Flenniken 7 6-16-15	1000	2385
Crawford & Sebastian's James 7, 6-16-15	¶20	2352
Estes et al's Murphy 1, 15-16-15	900	2464
Federal Pet. Co.'s Ballard 7, 10-16-15	2500	2645
Gulf Ref. Co.'s Alphin 15, 10-16-15	300	2389
Flenniken 11, 5-16-15	1750	2384
Fagg 1, 7-16-15	50	2630
T. C. Murphy 5, 9-16-15	600	2455
Hardy Murphy 6, 3-16-15	¶15	2230
Imperial Oil & Gas Co.'s McClanahan 7, 6-16-15	3000	2385
E. M. Jones et al's Cook 1, 16-16-15	250	2500
Lion Oil & Ref. Co.'s Murphy H-2, 9-16-15	1500	2398
Mazda Oil Co.'s Lawton B-4, 10-16-15	500	2435
Pure Oil Co.'s Bilyieu 3, 8-16-15	*	2400
Ray Drilling Co.'s Tatum 3, 7-16-15	400	2425
Southern Oil Co.'s Lyall 4, 3-16-15	250	2345
Standard Oil Co.'s Alphin 21, 3-16-15	200	2385
Standard Oil Co.'s Hardy Murphy 25, 4-16-15	200	2375
Hardy Murphy 27, 9-16-15	150	2415
Sun Co.'s Hays 13, 3-16-15	1000	2375
Unity Pet. Co.'s Bilyieu E-2, 8-16-15	1500	2490
Total, 34 wells	¶55-42,725	

Louisiana

Bellevue Field, Bossier Parish—		
Autrey Oil Co.'s Elston 14, 10-19-11	25	360
Elston 13, 10-19-11	20	356
Total, 2 wells	45	
Cotton Valley Field—		
Gulf Ref. Co.'s Hodges A-1, 25-21-10	200	2520
Humble Oil & Ref. Co.'s Bodcau C-1, 13-21-10	100	2500
Weaver Bros. & Looney 25-21-10	10	2515
Woodley Pet. Co.'s Gray 3, 26-21-10	75	2535
Total, 4 wells	385	

Kansas

Company, Well, Location—	Initial Production Bbls.	Depth
Cowley County—		
Waite Phillips & Marland Wertmen 12, NEc SW NE 20-33-3	436	3231
Waite Phillips & Marland Caldwell 1 NWc 28-33-3	2920	3286
Gypsy Oil Co Hanson 1 SWc NW SE 28-33-3	100	3320
Waite Phillips Jacobus 1 SWc NW 14-30-3	*	3565
Coffey County—		
Pure Oil Co Pilcher 3 NWc SW NW 15-23-14	*	1709
Greenwood County—		
White Eagle O. & R. Kipfer 1 NWc NE 13-22-10	100	2186
Theta Oil Co. Browning 10 NEc NW 17-22-10	60	2320
Philips Pet. Co. Hillard 2 NEc SE SW 33-22-11	75	1922
Braden Bros. Miller 2 C NE 27-22-13	75	1850
Transcontinental Green 9 SWc NE SW 2-23-9	225	2364
Transcontinental Green 10 NWc NE SW 2-23-9	280	2350
Sheddy et al Green 1 NWc NE SW 2-23-9	225	2350
Phillips Pet. Co. Teeter 3 NWc SE SW 15-23-9	150	2386
McGinnis et al Teeter 8 SEc NW 15-23-9	200	2286
C. E. Roth & Mission Thrall 54 C N L S½ N½ SE 29-33-10	25	2377
Mid-Kansas O. & G. Co. Martindale 22 NEc SW SE 31-23-10	125	2375
Mid-Kansas O. & G. Co. Martindale 26 SEc NE SW 31-23-10	125	2407
Mid-Kansas O. & G. Co. Martindale 27 NWc SE 31-23-10	100	2415
Phillips Pet. Co. McKee 16 SEc NW NW 32-23-10	75	2331
Mission Oil Co. Thrall 8 SWc NW SW SW 32-23-10	125	2295
Mid-Kansas O. & G. Co. Ladd 12 NWc SE NE SE 19-25-9	150	2439
Rhodes & Abell Barnard 1 NWc NE SE 32-22-10	*	....
Theta Oil Co. Schneider 3 C N L NE SE 9-23-13	*	....
Syndicate Oil Co. Wiersching 1 NWc SE 24-23-9	*	2211
Brimm et al Lorrimer 1 SWc SE 1-28-12	*	1510
Woodson County—		
Hogueland Oil Co. Hogueland 1 SWc NW NE 29-23-15	*	1575
Iowa-Kansas Dev. Co. Allen 4, SEc NE 2-24-14	*	1652
Ladon et al Foutz 1 C NW 12-25-13	*	1535
Matthews et al Jeffers 1 NWc SE 36-26-15	*	....
Johnson & McCann Paeske 2 C E L NE NE 23-25-13	30	1428
Lyon County—		
Southwestern Pet. Co. Houghton 2 SWc SE NE 29-21-12	*	1940
Harvey County—		
Union Oil Co. Coertz 1 SEc 5-23-1	*	....
Butler County—		
Roxana Pet. Co. Dale 1, NEc SW NE 8-25-3	*	2350
Olahan & Dungee Fisher 1 SWc SE 31-26-6	*	2803
Lewis Oil Co. Lill 1 SWc SE NE 18-27-7	*	2705

Oklahoma

Company, Well, Location—	Initial Production Bbls.	Depth
Kay County—		
Marland Oil Co.'s Hockstetter 3 C NE NE SW 1-26-2w	¶	2654
Louis Friedman's Siler 1 C SE SE NE 28-25-1w	136	4254
Logan County—		
McMann & Nixon's Field 1 SWc NE SE 35-17-4w	*	....
Pawnee County—		
Magnolia Pet. Co.'s Miller 7 C SW NW NW 4-22-3	641	4058
Magnolia Whitewater 1 C NE SE SW 31-23-3	*	4247
S. H. Markham 1 NEc SE SW 24-20-6	*	2585
Garvin County—		
Tulsa Oil Co. Harkreader 4 C SL NW S 11-1-3w	75	1597
Magnolia Pet. Co.'s Harris 6 C SE SW NW 16-1-3w	150	1580
Carter Oil Co.'s Deryden 3 SW SE NW 17-1-5w	100	1574
Texas Pacific Coal & Oil Co. W. J. Bailey 1 NEc NW 21-1-3w	80	1591
Kingfisher County—		
Carston et al Dickerson 1 SE 3-17-5w	*	2310
Garfield County—		
Crews Heirs Oil Co.'s Crews 10 NEc SW 19-22-3w	10	2152
Sinclair Oil & Gas Co.'s Harris 3 CEL SE 23-22-4w	5	2325
Sinclair Larum Crews 8 NWc NE NW SE 30-22-3w	*	2570
Summers & Atlantic Oil Prod. Co.'s Ray 1 NWc NW 19-20-5w	*	3830
Creek County—		
Carmen et al Tiger 2 SEc NE SE 5-15-9	*	3550
Ireland Oil Co. et al Noll Weaver SWc NW 8-17-11	*	2517
Tidal Oil Co.'s Atkins 1 SWc SE SW 8-18-9	*	3255
Aztec Oil Co.'s Johnson 4 NEc SE SE 14-17-8	120	2337
Trancontinental Oil Co.'s Morrison 1 SEc NE NW 25-17-8	¶	2771
C. G. Tibbens Bearhead 3 SWc NW NW 13-14-8	40	2373
Texas Co.'s Love 6 SEc SW NE 7-14-8	20	2488
Pure Oil Co.'s Robinson 1 SWc SW NW 29-14-8	100	3419
J. H. Wright's Tahkaney 8 SWc NE SE 24-17-8	**300**	**2385**
O. R. Howard's McNae 4 NWc SE NE 16-16-9	1050	3028
Shaffer Oil & Refg. Long 1 SEc NE NE 6-14-9	60	3710
Wilcox Oil & Gas Co.'s Kimble & Reading 9 SEc NE 20-14-10	125	370
Prairie Oil & Gas Co.'s P. L. Shoals 9 "C" C SE NE SE 33-16-9	35	2915
Lincoln County—		
Magnolia Pet. Co.'s Ingram 2 NEc SE SW 34-15-5	190	3465
Sinclair Oil & Gas Co.'s Ingram 1 SEc NE SW 34-15-5	85	3469
Twin State Oil Co.'s Biwater 1 SWc NW NW 2-15-5	1150	3417
Magnolia Sukovaty 1 NWc SW NW NW 2-15-5	1625	3417
Amerada Pet. Co.'s Belless 1 NEc NE SW 3-14-5	50	3457
Selby & Southwestern Pet. Co.'s Bagwell 2 NEc SE SE 3-14-5	415	3369
Wilcox Oil & Gas Co.'s Richardson 1 SWc NW SW 8-12-5	45	4234
Tillman County—		
H. S. & H. Oil Co.'s Fruitt 1 SEc SW SE 11-1-16	*	820
Tulsa County—		
I. D. Simmons Partridge 6 CN L S½ NE NW 4-9-12	15	1973
Thornton et al Berry 15 NWc SW SE SW 20-19-12	30	2090
Gypsy Oil Co.'s Gary 11 NWc SW NW 6-18-12	75	2067
Pouder & Co.'s Strip 6 NWc NE SE NW 16-18-13	30	1194
Pouder & Pomeroy's Strip 7 SWc NE SE NW 16-18-13	50	1196
Pouder & Pomeroy's Strip 8 NWc SE SE NW 16-18-13	35	1196
Hivick & O'Reilly's L. R. Walker 4 NEc NW NE SW 16-18-13	70	1209
Frates Oil Co.'s Unallotted 3 SWc NE 2-17-14	100	1372
H. & H. Oil Co.'s McIntosh 8 C SW NE 3-18-14	*	1927
Wade et al Gaines 2 NWc SE NE 2-17-14	100	1374
Sand Springs Home Oil Co.'s Steel 1 NWc SW 4-19-11	*	1900
Sand Springs Twin 2 SWc SE 10-19-11	*	1875
Echo Oil Co.'s Inchoe 1 NEc E SE 34-19-11	*	2442

Company, Well, Location—	Initial Production Bbls.	Depth
Edwards et al Fore C S L SE SW NE 2-18-12	*	....
Edwards et al Unallotted 3 SEc NE NE 2-18-12	*	....
Okmulgee County—		
Cosden Oil & Gas Co.'s Moore 1 NEc SW 14-15-22	507	2649
Thompson & Jordan's Hill 4 C NE SW 28-15-12	35	2220
Simmons Oil Co.'s A. K. Rentie 3 Twin NWc SW NW 21-12-12	440	2600
Iron Mountain Oil Co.'s W. Thornsberry 8 SWc SE NW 24-13-14	1500	1964
J. L. Selby's A. Anderson 28 NWc SE NW 35-14-14	20	1151
Amerada Pet. Co.'s Hodge 1 NWc SW NE 21-16-11	*	2992
J. E. Crosby Fee 14 NEc SW 21-16-11	*	2876
Hutchinson's Anderson 3 NWc SE 34-16-12	*	1903
J. Bright's A. Lee 1 C S L NW NW 26-15-12	*	2226
Eastern Oil Co.'s Kemp 10 NEc SE SW 2-13-11	*	3243
Wagoner County—		
J. E. Martin's Haynie 3 C NW SW SW 12-17-14	20	1086
Okfuskee County—		
Indiahoma Corp. Roberts 4 C W L SW NW 33-13-11	*	3266
Penmar Oil Co.'s Moore 1 NWc SW SE 11-13-12	*	2160
Simms Oil Co.'s Jordan 3 C NW SW NE 31-12-12	*	3371
Independent-Kingwood et al Rentie 1 NWc SW 31-12-12	*	3305
Buckels et al Jackson 2 SWc NW NW 5-11-12	*	2612
C. E. Campbell's N. Sampson 5 C SW NW 30-13-15	*	2968
A. E. Kirland's N. G. Butler 1 SWc SE NE 8-15-13	*	2560
Hughes County—		
Indian Territory Illum. Co.'s M. Anderson 4 C NE NW SE 1-9-9	1071	3401
Josey Oil Co.'s C. Arbor 1 C SE SW NW 1-9-9	175	3386
T. B. Slick I. Grayson 9, C NE SW SE 3-9-9	275	3303
Magnolia Pet. Co.'s B. Harjo 2 C SW SE SW 4-9-11	180	3049
Margay Oil Co.'s Brown 2 C NW NW SW 17-9-9	*	3156
Muskogee County—		
J. L. Powell's Pouncil 2 SEc NE SE 32-15-16	*	2103
Grady County—		
Carter Oil Co.'s Wilford 1 SEc SE SW 16-3-5w	¶	1015
Jefferson County—		
Gypsy Oil Co.'s Seay 1 SEc NE 33-6s-5w	40	1223
Humble-Hambro Indian 1 SWc NW 34-6s-5w	200	1197
Seminole County—		
Wrightsman & Gardner's B. O. Lock 1 SEc NW 31-10-7	*	4011
Cosden & Waite Phillips H. Williams 3 C NW NE SW 33-11-8	499	4334
Sinclair-Houston M. Hill 1 C SE NW NE 33-11-8	880	3424
Gypsy Oil Co.'s C. Jackson 5 C NW SW NE 33-11-8	300	3438
Gypsy Oil Co.'s H. Brown 1 C SW NE NE 33-11-8	230	3456
Carter-Pulaski Williams 2 C SW SW NW 33-11-8	225	3473
McMann & Magnolia J. Foster 5 C SE SW 34-11-8	175	3395
Dixie Oil Co.'s Lyongs 25 C NW SW SE 25-8-7	30	3070
P. & R. Corp. Ames 4 C SW SE 31-8-8	160	3240
Gypsy Oil Co.'s C. Jackson 8 C NE SE NE 33-11-8	*	3493
Sinclair Oil & Gas Co.'s S. Jackson 2 C NW SW NW 34-11-8	*	3485
Okfuskee County—		
Mid-Continent Pet. Co.'s R. Walker 1 C SE SW SW 16-10-9	¶	3227
North Baltimore Oil Co.'s Taylor 1 NEc NW NW 14-11-11	*	2806
Windsor Oil Co.'s Holmes 5 SWc NW SE 22-11-11	*	2502

Company, Well, Location—	Initial Production Bbls.	Depth
Indian Territory Illum. Co.'s J. Williams 5 C SW NE SE 34-10-9	*	....
Indian Territory Illum. Co.'s J. Williams 6 C NE NE NE 34-10-9	*	....
T. B. Slick A. Dunson 2 C SE SE NE 35-10-9	*	4166
Carter County—		
Schermerhorn Oil Co.'s Watkins 1 C NW NW NE 8-3s-2w	25	3131
Amerada Pet. Co.'s Twin Criner 5 SWc NE NE NW 20-5s-1	41	2063
Coline Oil Co.'s Lewis 1 C NE SW SE 5-5s-2w	*	2863
Stephens County—		
Amerada Pet. Co.'s Ketchum 2 SWc NW NW 24-1-4w	40	2304
Eagle Creek Oil Co.'s Brown 3 C E L SE NE 26-1-4w	70	2280
Crump & Beard A. Eakes 1 NEc SW 32-1s-8w	40	2235
Empire Gas & Fuel Co.'s Story 2 NEc SE SE NW 32-1s-8w	40	2241
Magnolia Pet. Co.'s Montgomery 1 SEc SW SE 11-2s-8w	20	1994
Winkler et al Bristowe 2 C SE SE SW 18-2s-7w	30	1384
Winkler et al Bristowe 3 C NE SE SW 18-2s-7w	50	1415
Lone Star Gas Co.'s Price 2 C NE SE SE 9-1s-5w	*	1540
Osage County—		
Breene et al 12 C N L S½ N½ NW 23-21-10	105	1834
Breene et al 10 SE SW NW 5-21-11	100	2021
Titus et al 8 C SW NE NE 6-21-11	25	1817
Eliott et al 18 NW SE NW NW 30-21-12	30	1402
Atlantic Oil Prod. Co.'s 3 NE NW NW SE 8-22-9	700	2790
Peters Pet. Co.'s 5 SW NE SW SE 12-23-8	100	2146
Winona Oil Co.'s 13 C S L N½ S½ SE 28-24-10	10	1390
Owen Osage Oil Co.'s 326 SE NE NW 32-24-12	¶	1967
Pennock Oil Co.'s 2 SE NE 32-25-11	30	1724
Mid-Kansas Oil & Gas Co.'s 3 NW SE 33-25-11	10	2807
Phillips Pet. Co.'s 6 C N SW NW 12-27-5	100	3007
Phillips 9 C SW NW NW 12-27-5	100	2993
Texas Co.'s 15 NWc 18-27-6	550	2968
Wise Oil Co.'s 9 NW NE NW 27-29-11	75	1021
Beacon Oil Co.'s 15 C S L SE 27-29-11	120	803
Phillips et al 3 NW NE NW NE 35-29-11	30	1010
Mid-Continent Pet. Co.'s 2 C SE NW SW 24-21-8	*	1275
J. C. Stine 4 C S L SW 9-21-12	*	1566
Plymouth Oil Co.'s 3 NE SW NE NE 33-22-9	*	2235
Owen Osage 32 SWc 11-27-11	*	1931
Gypsy Oil Co.'s 1 SE NE SW 21-28-7	*	3200

Mountain States

MONTANA

Kevin-Sunburst Field—		
Ferdig-Anderson-Breckon et al No. 7A SE¼ 30-35-1	2400	1503
27-35-2	30	1400
The 56 Petroleum Co.'s No. 1S NW¼ 32-35-1	325	1500
O'Neil Bros.' No. 18 NW¼ 4-34-2	*	....

WYOMING

Salt Creek Field—		
Prairie Oil & Gas Co.'s No. 11 30-40-78	40	2250
Continental Oil Co.'s No. 8AS SW¼ 2-39-79	150	1832
No. 31AN 19-40-78	150	2430
No. 31AB 19-40-78	100	2340
No. 33AN 10-40-78	75	2598
E. T. Williams Oil Co.'s No. 36AX NW¼ 20-40-79	65	2396
Carter Oil Co.'s No. 14P 17-39-78	*	2970
Texas Production Co.'s No. 19A SE¼ 32-40-79	65	1950
Midwest Oil Co.'s No. 24A SW¼ 19-40-78	75	2346
No. 19A NE¼ 35-40-79	50	1445
No. 24A SE¼ 11-40-79	75	2110

Company, Well, Location—	Initial Production Bbls.	Depth
Salt Creek Consolidated Oil Co.'s		
No. 29A NW¼ 11-39-79	75	2345
No. 13A NW¼ 31-40-78	65	2135
Wyoming Oil Fields Co.'s No. 4 SW¼ 23-40-79	80	1170
Steel Creek Structure—		
R. C. Tarrant Interests' No. 1	*	3098

COLORADO

Wellington Dome—		
Producers & Refiners Corporation's No. 1 16-10-69	*	2260

NEW MEXICO

Artesia Field—		
Twin Lakes Oil Co.'s No. 4	250	2200
Jackson Interests' No. 1	75	2250
Snowden & McSweeney's No. 1	75	2320

Eastern States

PENNSYLVANIA

Bradford Field—		
C. A. Duke Duke 1	2	....
Sprague & Hitler Keller 1	2	....
Linwood Oil Co. Chapin 1	2	....
R. C. Lloyd Ekas 1	2	....
Denwood Oil Co. Garlock 1	2	....
E. F. Connors Erie Railroad Right of Way 9	2	....
Barry Estate Barry 2	3	....
South Penn Oil Co. Bingham 439, tract 82	3	....
McDowell & Andrus Bingham 296 tract 100	3	....
J. H. Brahaney Johnson Estate 16	2	....
A. A. Parks Parks 1	2	....
F. J. & E. L. Shippey Shippey 14	2	....
Duke & Co. Kervin 1	2	....
Ostrander & Co. Lovell 1	2	....
D. W. Daly Bingham 1	3	....
Lincoln & Co. Rew 1	2	....
C. B. Kervin Backus 1	2	....
C. B. Kervin Baldwin 1	2	....
B. Devlin Devlin 1	2	....
Wolte Oil Co. Rew 1	2	....
Greene County—		
Manufacturers Light & Heat Co. J. W. Closser 5	140	....
City & Suburban Gas Co. Alfred Rutan 1	5	....
Spencer, Stockdale & Co. Morford heirs 2	¶1½	....
People's Natural Gas Co. Jonathan Fox 1	¶5	....
Venango County—		
Edward Seiderman & Co. Hasson 50	2	....
Espy Oil Co. Espy 18	2	....
Allegheny County—		
Ferguson & Co. Conrad Hardt 1	2	....
F. W. Forney & Co. Thomas Donaldson 1	2	....
Washington County—		
Manufacturers Light & Heat Co. J. S. Elliott 1	¶1½	....
Jefferson County—		
T. W. Phillips Oil & Gas Co. G. E. Kinselman 1	¶2½	....

WEST VIRGINIA

Doddridge County—		
Carter Oil Co. W. H. Hufford 2	12	....
Carter Oil Co. L McIntyre 1	5	....
T. J. Gillespie Littleton-Fetty 1	¶1½	....
Trainer Bros. & Ash M. Scott 1	¶2	2885
Hope Construction & Refg. Co. W. H. Douglas 6	5	....
Henderson & Maxwell F. P. Burbridge 1	2	....
Lewis County—		
Bish & Co. John West 1	¶2½	....
Reserve Gas Co. McDonald-Murray 1	¶2½	....
Wead, Smith & Co. John Whelan 1	¶2	....
West Fork Oil & Gas Co. Oliver Rhodes 1	¶2¼	....
McCall & Co. W. M. Watson 2	*	....
Ritchie County—		
Adams Oil Co. James Newbrough 2	20	....
Southern Oil Co. A. E. Ryan 6	¶1¼	....
F. Gillespie Jacob Dotson 1	¶1¼	....
Carnegie Natural Gas Co. J. M. Wilson 4	¶2	....
Lincoln County—		
Columbia Gas & Electric Co. M. V. Vickers 1	¶¼	....
West Side Gas Co. M. D. Goode 2	¶1½	....
Ray Gas Co. M. F. Gilbert 1	¶1½	....
Foote Oil & Gas Co. Thomas E. Thompson 1	¶1¼	....

Company, Well, Location—	Initial Production Bbls.	Depth
Marion County—		
Owens Bottle Machine Co. C. T. Brownell 1	¶3	....
South Penn Oil Co. O. N. Koen 1..	¶¼	....
South Penn Oil Co. D. F. Hamilton 1	¶3	3095
South Penn Oil Co. James Youst 6..	*	....
Wood County—		
Power Oil Co. Volcanic Tract 106..	2	....
F. G. Mixer & Co. Case Uhl 1.....	5	....
Stout Bros. W. L. Munshmyer 56...	2	....
Marshall County—		
Decem Development Co. Phillip Markey 4	18	....
Wasmuth-Callahan Oil Co. Mary Riley heirs 5	20	....
Wirt County—		
Standard Stone Oil Co. W. P. Hays 1	2	....
Roberts Bros. Rathbun Tract 126..	*	....
Wetzel County—		
D. W. Null & Co. Thos. Phillips 1..	¶2	....
Carnegie Natural Gas Co. Amanda Soles 1	¶2¼	....
Gilmer County—		
Philadelphia Oil Co. Luella Radcliff 1	¶3	....
Harrison County—		
Grasselli Chemical Co. J. M. Lewis 1	¶2½	....
Boone County—		
Owens Bottle Machine Co. W. W. Smoot 1	¶2½	....
Monongalia County—		
Hope Construction & Refg. Co. Lewis Tennant 1	¶2	....
Cabell County—		
C. O. Nixon & Co. F. J. Templeton 1	*	4850

KENTUCKY

Barren County—		
Porter & Co. McGlochlin 7.....	15	....
Star Oil Co. Ritchie 25.....	10	....
Star Oil Co. Ritchie 26.....	12	....
L. J. Emery, Jr. Sons Co. Depp-Greer 10	9	....
L. J. Emery, Jr. Sons Co. Depp-Greer 11	4	....
Travis, Fred Moore & Co. 8.....	5	560
Gumm & Messenger Regal 1.....	8	....
Harrington & Norris Bros. Evans 7	16	....
Consolidated Gas Co. Depp 2.....	4	510
Consolidated Gas Co. C. A. Turner 1	*	....
Carter Oil Co. Jess Wininger 4....	3	541
Unknown Parties Miller 1.....	*	600
Hammerley & Co. John A. Dodd 1.	*	500
Esslinger Oil Co. Jones 4.....	*	610
Dr. Young Thomas Jones 1.....	*	600
Owensboro District——		
Panther Creek Oil Co. J. W. Smith 6	10	....
Panther Creek Oil Co. J. W. Smith 7	10	....
Pennsylvania-Indiana Oil Co. Jess Swope 4	50	....
Pennsylvania-Indiana Oil Co. Simpson 1	*	....

Company, Well, Location—	Initial Production Bbls.	Depth
Ike N. Harless J. & A. Casey 9....	*	....
Allen County—		
Simpson & Stentz W. C. Cockrill 3.	15	298
Keys Oil Co. R. L. Beam 6.....	6	350
Keys Oil Co. Marcum 1.....	*	....
White Plains Oil & Gas Co. J. F. Neil 8	1	366
Central Southern Oil Co. Walker 9.	*	320
Warren County—		
Hanrahan-Onsel Oil Co. Wilson 8..	4	....
McCombs Prod. & Refg. Co. Riggle-wood 5	4	1100
Martin County—		
Leonard & Ralph Mayo Lands 4...	¶3	....
Big Darby Oil & Gas Co. Alf Carter 1	¶3	....
Lawrence-Johnson Counties—		
Union Gas & Oil Co. C. E. Frailey 6	25	781
Wayne County—		
Bell Bros. Coffey heirs 2.....	1	....

SOUTHEASTERN OHIO

Washington County—		
Alexander, Wiper & Co. George Schmidt 1	5	....
Muskingum Gas Co. John Scott 1..	¶1¼	....
Pollard, Schultz & Co. Neal Shaw 4	¶½	....
Bell Oil & Gas Co. Johns & Grandstaff 3	¶½	....
Carter Oil Co. H. W. Winland No. 2, tract 1	¶1¼	....
Calvin A. Peavey & Co. Torner 70..	*	1250
Noble County—		
Felix Gerst & Co. Sebastian Dimmer 10	2	....
O. O. Kinsey Elmer Hesson 4.....	3	....
Haines & Co. Davis 2.....	2	....
C. D. Harper & Co. Forrest Moore 1	¶½	....
C. H. Devaughn & Co. E. McLaughlin 1	*	1840
Jefferson County—		
J. W. Robertson & Co. D. Crouch 1	¶½	....
Penn & McMullen William McKean 1	*	....
Chesbrough Mfg. Co. Gotlieb Teatner 8	*	....

CENTRAL OHIO

Licking County—		
Edward H. Everett Co. Daniel Lehman 1	100	....
Wehrle Interests Otto Voglemier 2..	8	....
Elmer Vance 2	*	....
Midland Oil Co. Moses Coopenrider 8	¶¼	....
F. M. Rugg & Co. Jacob E. Weiss 6	6	....
Holmes County—		
East Ohio Gas Co. C. M. Shanks 4	¶1	....
East Ohio Gas Co. Dave Anderson 3	10	....
East Ohio Gas Co. James Allison 2	*	....
Kline, Eckstein-McCann Co. W. & L. Armstrong 1	¶1	....
Hocking County—		
Gordon Oil Co. W. L. Wagner 2...	120	....

Company, Well and Location	Initial Production Bbls.	Depth
Kachelmacher Estate James J. Tracey 17	10	....
Jacobs Oil Co. J. & N. Jacobs 4....	45	....
Knox County—		
East Ohio Gas Co. Allen Scholes 1	*	....
East Ohio Gas Co. John Snively 14	4	....
William Carson William Carson 1..	3	....
Wayne County—		
Ohio Oil Co. G. W. Roth 1.....	¶½	....
W. E. Hawk & Co. Geo. Gingery 1	*	....
Perry County—		
Sunday Creek Coal Co. Fee 125....	92	....
Athens County—		
Wm. Hawkins & Co. L. H. Allen 1.	¶1¼	....
Lorain County—		
Daugherty Bros. F. S. Akins 2.....	*	....

NORTHWESTERN OHIO

Wood County—		
Collins & Echler E. St. John 17....	40	1593
John E. Welton & Co. Lindemier 8.	18	1295
Eurnell & Gage Deloy Speck 3.....	4	1573
Shelby County—		
Slagel & Johnson Henry Holecker 2	20	1265
Eilerman Oil Co. Wm. Kloecker 1.	17	1269
Lee A. Watson J. H. Barkhorst 3..	10	1255
Auglaize County—		
Galloway & Drake W. E. Miller 1..	¶1	1300
E. E. Loeber Charles McPherson 1..	*	1300
Fowler Bros. Petroleum Co. M. & E. Wolfe 2	*	1340
Hancock County—		
Ohio Oil Co. J. Newhouse 68.....	2	1500
Harpst Bros. Henry Schwinn 16...	10	1347
Van Wert County—		
A. C. Grace C. W. Crone 1.....	3	1235
Stelzer & McClure Keyser-Forewater 3	*	1261
Mercer County—		
Mack P. Colt & Co. W. M. Miller 3	60	1273
Sandusky County—		
Ohio Oil Co. Taulker Bros. 24.....	5	1334
Allen County—		
Ohio Oil Co. Eli Crites 17.....	2	1300
Lucas County—		
Doblinger Bros. Mrs. A. Ward 1...	1	1340
Seneca County—		
E. T. Robinson E. W. Snyder 1....	2	2235

INDIANA

Pike County—		
Murphy Oil Co. M. Burnett 1.....	*	....

ILLINOIS

Wabash County—		
J. S. Young Jr. & Co. A. Hosmer 1.	*	1602
J. S. Young Jr. & Co. Rose Mullinax 1	*	1600
Timberlake & Co. Sarah E. Litherland 1	*	1650
Crawford County—		
Frank McNeal & Co. C. S. Jones 6..	21	999
Clark County—		
C. L. Palmer G. W. Harrod 7.....	1	....

WILDCATS FROM ALL SECTIONS

Central West Texas Wildcats

COMPLETIONS

Company, Well, Location—	Initial Production Bbls.	Depth
Brown County—		
Mendenhall et al Newton 5	35	1255
Moore et al Chambers 1.....	*	2785
Moore & Wilson et al Gafford 3....	190	1254
McMurray et al Newton 7.....	10	1253
Rhoades & Hightower et al Prater 7	40	1318
Concho County—		
Dome Prod. Co. Mrs. Hartgrove 2	*	1422
Palo Pinto County—		
Pender Prod Co. A. Rasmussen 1, ¶5-350		3600
Mitchell County—		
The California Co. Morrison 13....	70	3035
S. A. Sloan et al Sam Smart 6.....	80	3052
Sam Smart 7	35	3090

Company, Well, Location—	Initial Production Bbls.	Depth
Reagan County—		
Big Lake Oil Co. University 29, (SE SE Sec. 25, blk. 9)	75	3041
H. B. McGuire et al C. W. Merchant 1, (Sec. 12, blk. "A").....	*	3507
Texon Oil & Land Co. University 13, (C NE SW Sec. 36, blk. 9)..	2230	2986
Upton County—		
Bell-Regan et al University 1, (Sec. 2, blk. 4)	*	3502

DRILLING REPORT

BROWN COUNTY—Cal-Bro. Oil Synd.'s Prater 1, dr 1150 ft. Gillman et al's Newton 11, rig; Newton 12, dr 570 ft; Newton 13, rig. Gillman & McMurray's W. H. G. Chambers 1, testing pay 1217-28 ft; Teston 4, dr 1160 ft; Moore 4, making gas 1130 ft. Gillette et al's Prater 5, dr 350 ft. Howell & Houseman's Helms 1, fsh 970 ft. Huffman et al's Armstrong 1, dr 1165 ft. Ingleright et al's Eubanks 1, lcn. Mendenhall et al's Newton 6, rig; Newton 7, dr 460 ft. Moore et al's Kilgore 1, dr 620 ft. Chambers 2, rig; Baxter 1, dr oil pay 1280 ft. Prairie Oil & Gas Co.'s Armstrong 1, dr 650 ft; Gaines 6, dr 765 ft; Gaines 7, testing sand 1287 ft; Gaines 8, dr 1165 ft; Newton 11, spudding. Simms Oil Co.'s Gaines 1, sd 1485 ft. Stone et al's Byrd 1, rig. Ward Oil Co.'s Windham 1, sd 2600 ft.

CALLAHAN COUNTY — Mook-Wakefield & Canyon Oil & Gas Co.'s McDonough 1, dr 1040 ft. Nichols et al's Davis 1, co after shot 1785 ft. Urban et al's Finley 1, dr 1330 ft.

COLEMAN COUNTY—Canyon Oil & Gas Co.'s Harris 1, spudding; Morris 1, dr hfw 2560 ft. Duncan et al's Gray 1, dr 935 ft.

PALO PINTO COUNTY—Burton-McKee Oil Corp.'s Strawn Coal Co. Fee 4, dr 3490 ft. J. D. Crawford-Singleton et al's L. Smith 1, sd 3028 ft. Jack Dalton Oil Co.'s Dalton 6, dr 3580 ft. Hughes et al's Dalton 1, dr 450 ft. E. T. Hart et al's Cardwell 2, dr 1825 ft.

Nelson Oil Synd.'s Owens 1, dr 890 ft. Pender Prod. Co. Slemmons 3, rig.

BREWSTER COUNTY—Green Valley Oil Corp.'s J. P. Wilson 1, (Sec. 8, blk. 212) sd 1860 ft.

COKE COUNTY—West Virginia Market. Assn.'s J. R. Mims 1, dr 3195 ft.

CROCKETT COUNTY — Humble & Marland's L. P. Powell 1, swabbing 115 bbls oil 2647 ft. Crockett Drilling Synd.'s Robt. Massey 1, dr 1675 ft; J. M. Shannon 2, spudded and sd. Red Ball Oil Co.'s University 1, (Sec. 5, blk. 29) rig. Shaffer et al's University 1, Sec. 13, blk. 47, lcn. J. C. Cook (Wilcox Oil & Gas Co.'s) University 1, sec. 14, blk. 29, rig.

CULBERSON COUNTY — The California Co.'s Watkins et al 1, dr 935 ft. Grisham et al's Grisham 1, dr 265 ft.

JEFF DAVIS COUNTY—Bill Little et al's Denton 1, (15 miles west of Valentine) lcn.

GARZA COUNTY—Gulf Prod. Co.'s J. B. Slaughter 1, dr 600 ft.

GLASSCOCK COUNTY—Gulf Prod. Co.'s L. S. McDowell 2-C, Sec. 30, blk. 34, rig.

HOWARD COUNTY—Deep Rock Oil Co.'s W. T. Scott-Hyman 1, lcn in center SE¼ Sec. 88, blk. 29, W&NW R. R. sur.

IRION COUNTY—Chas. Denny et al's D. E. Hughes 1, sd 1470 ft. W. A. Stout et al's J. D. Sugg 1, sd 1830 ft.

KENT COUNTY—C. F. Greenwood & Marland Oil Co.'s J. E. Kuteman 1, Sec. 11, blk. 4, ur 3040 ft.

LOVING COUNTY—Rio Grande Oil Co.'s Sid Kyle 1, Sec. 12, blk. 56, lcn. P-V Petroleum Co.'s Russell 1, showing oil 2764 ft, dr 3055 ft.

MITCHELL COUNTY — The California Co.'s Butler 2, dr 1255 ft; Abrams 9, dr 530 ft; Missouri State Life Fee 1, rig; Womack 1, dr 975 ft. Morrison-Thompson's Womack 1, rig. Eastland Oil Co.'s Keynard 4, Sec. 15, blk. 28, T&P sur, lcn. S. A. Sloan et al's Scott 1, dr 2350 ft. Magnolia Pet. Co.'s W. H. Badgett 1, dr 2100 ft; Mary Foster 1, dr 1010 ft.

MARTIN COUNTY—Humble Oil & Ref. Co.'s C. C. Slaughter 1, Sec. 8, blk. 35, dr 910 ft.

MIDLAND COUNTY — Rook-Zimmerman's M. E. Hill 1, Sec. 8, T&P sur, blk. 37, spudding.

PECOS COUNTY—Gulf Prod. Co.'s White-Baker 1, Sec. 85, blk 194, dr lime 3275 ft. Tom Adams Oil Co.'s Devlin 1, (17 miles NW of Fort Stockton) showing oil 1005 ft.

PRESIDIO COUNTY—John Sward et al's Tootle 1, sd 900 ft.

REAGAN COUNTY—Big Lake Oil Co.'s University 17, dd, mudding off gas 2794 ft; University 20, fsh tools 2500 ft; University 26, pull big pipe 2905 ft; University 28, cemented casing 2916 ft; University 30, rig; University 31, dr 300 ft; University 32, dr 720 ft; University 33, dr 550 ft; University 34, dr 1040 ft; University 35, dr 2355 ft; University 36, dr 2485 ft; University 37, fsh 2440 ft; University 38, ur 8¼ 2500 ft; University 39, dr 2485 ft; University 40, dr 725 ft; University 41, dr 1750 ft; University 42, dr 2400 ft. The California Co.'s University 1, Sec. 13, blk. 8, co after shot 20 qts. at 4066-82 ft. H. D. Camp et al's (was J. T. Stover) University 1, Sec. 34, blk. 11, sd 200 ft. B. H. Cogdell et al's University 1, Sec. 23, blk 8, sd 2655 ft. W. H. Dunning et al's J. D. Sugg 1, Sec. 185, blk. 2, T&P sur, dr 580 ft. Ben Simon et al's University 1, blk. 11, lcn. L. V. Tannehill et al's University 1, Sec. 15, blk. 11, lcn. Texon Oil & Land Co.'s University 12, co 2490 ft; University 14, dr up bailer 2495 ft; University 15, ur 8¼ casing 2510 ft; University 16, fsh tools 2550 ft; University 17, dr 2640 ft; University 18, dr 2520 ft; University 19, set 8¼ casing 2437 ft; University 20, dr 690 ft; University 21, dr 1000 ft; University 22 to 29, inclusive, rigs; University 4, Group 2, rig. University Oil Co.'s University 1, Sec. 17, blk. 10, sd 2860 ft.

SCURRY COUNTY—Northwest Co.'s Newman 1, Sec. 115, H&TC sur, blk. 97, spudded and sd. The California Co.'s C. E. Wood 1, lot 3, C. A. O'Keefe subdiv., dr 75 ft. Morrison-Thompson's Mary E. Towle 1, rig.

STONEWALL COUNTY—Elder Nance et al's Ward 1, sd 2120 ft; J. M. Thomas 1, star machine.

STERLING COUNTY — Chicago-Texas Oil & Gas Co.'s D. C. Durham 1, sd 2250 ft; Durham 2, sd 1455 ft. Co-Operative Lease & Dev. Co.'s Douthitt 1, sd 2280 ft. George Northrup & Hall et al's I. L. Ellwood 1, dr 2315 ft. Kanawah-Angelo Oil Co.'s L. T. Clark 1, dr 1860 ft. Ford & Cogdell's W. L. Foster 1, dr 1960 ft. Pettit & Adkisson's C. C. Reynolds 1, dr 2715 ft. Harty et al's Reynolds 1, rig. C. W. Wrightsman et al's W. L. Foster 1, rig; G. R. Hull 1 (was Fidelity) sd 1865 ft. White Eagle Oil & Ref. Co.'s H. H. Mills 1, SE¼ Sec. 33, blk. 22, H&TC sur, rig.

UPTON COUNTY—Big Mesa Oil Co.'s University 1, Sec. 17, blk. 3, sd 860 ft. W. P. Morris et al's H. M. Halff 1, sd 455 ft. Suggs & Chancellor's University 1, Sec. 6, blk. 4, spudded and sd.

North Texas Wildcats

COMPLETIONS

Company, Well, Location—	Initial Production Bbls.	Depth
Baylor County—		
Gulf Prod. Co.'s Mills 1.....	*	1483
D. H. Moore et al's Fancher et al 2	*	996
Mills Farm Oil Co. Mills 1.....	*	1500
Maer-Staniforth et al Mills 1.....	60	1426
Montague County—		
Arco Oil Co. M. H. Salmon 1.....	30	1415
Daniels-Rutis & Panhandle Ref. Co. M. H. Salmon 2.....	35	938
Humphreys Corp. A. B. Hinton 1..	50	1844
Throckmorton County—		
Humble Oil & Ref. Co. Harrison 2.	¶10	836
Wilbarger County—		
Consolidated Oil Co. First State Bank Fee 1	*	2050
Humble Oil & Ref. Co. (was Dyson et al) Waggoner 1-G	150	1878
States Oil Corp. Waggoner 1	†	900
Texhoma & Holmes et al Mrs. Thomas 1	†	1564

Texas Panhandle Wildcats

COMPLETIONS

Carson County—		
Gulf Prod. Co. Burnett 8	70	2931
Hutchinson County—		
Gulf Prod. Co. Dial-Perkins 2.....	285	2896

DRILLING REPORT

CARSON COUNTY — American Ref. Co.'s Burnett 1-C, dr 2625 ft; Burnett 1-D, sd 1500 ft. Crosbie Oil Co.'s Burnett 2, making 150 bbls oil 2854-64 ft and 2866-69 ft, sd td 2940 ft; Burnett 3, rig. Culbertson Bros. et al's Burnett 1, cable rig. Gulf Prod. Co.'s Burnett 9, dr 1795 ft. Magnolia Pet. Co.'s Burnett 1-A, dr 1850 ft. Marland Oil Co.'s Burnett 2, dr 1785 ft; Burnett 3, rig; Burnett 4, lcn. Olson et al's Burnett 1, co 2970 ft. Premier Oil Corp.'s Burnett 1, sd making gas 2860 ft. W. W. Silk et al's Burnett 4, dr 1950 ft; Burnett 5, lcn. The Texas Co.'s Burnett 6, dr 1880 ft; M. C. Burnett 3, dr 2830 ft.

COLLINGSWORTH COUNTY—Continental Oil Co.'s Hughes Estate 1, rig.

COTTLE COUNTY—T. J. Woodley et al's A. C. Dulaney 1, sd 3005 ft; Dulaney 2, lcn is in NW corner sec 15, blk "M", R. M. Thompson sur.

DALLAM COUNTY—H. A. Martin et al's James 1, co 1640 ft.

DICKENS COUNTY—Mickels et al's Pitchfork Ranch 1, sd 350 ft.

GAINES COUNTY—Frank Phelps & Mundy's M. C. Lindsey 1, dr 775 ft.

GRAY COUNTY—A. R. Anderson-Bock et al's Beaver-Bradford 1, sd 2830 ft. Danciger Oil and Ref. Co.'s J. B. Bowers 1-A, making 15 million ft gas, dr 2730 ft. W. H. Holmes' J. B. Morse 2, sd 3147 ft. Wilcox Oil & Gas Co.'s Coombs-Worley 2, cemented cave 2810 ft.

HUTCHINSON COUNTY — American Ref. Co.'s Weatherly 1, rig. Amarillo Oil Co.'s L. Bivins 2-B, plug back from 3135 ft to make gasser. W. T. Coble et al's J. A. Whittenburg 1, dr 1975 ft. Dixon Creek Oil Co.'s Smith 2, dr by tools 2730 ft. J. H. Middleton et al's J. Weatherly 1, dr 2315 ft. New Domain Oil & Gas Co.'s Barton 1, dr 2880 ft. Panhandle Ref. Co.'s Dial-Perkins 1, flowed 20 bbls oil per hr for 10 hrs after shot 3060 ft; Dial Perkins 2, dr rotary 630 ft; Dial-Perkins 3, lcn sec 1, H. and G. N. sur, blk 1; J. A. Whittenburg 1, lcn. J. R. Phillips et al's W. L. Kingsland 1, dr 350 ft; Kingsland 2, rig. Western Enterprise Oil & Gas Co.'s Smith 2, rig.

MOORE COUNTY—Amarillo Oil Co.'s Masterson 1-A, sd 2360 ft.

POTTER COUNTY—Amarillo Oil Co.'s W. H. Bush 1, dr by cas 3495 ft; L. Bivins 4-A, dr 300 ft.

ROBERTS COUNTY — Phil Engle et al's Mrs. Lederick 1, dr 3210 ft.

WHEELER COUNTY—Angus et al's Ember 1, dr 1675 ft. Best Oil & Gas Co.'s Tindall 1, sd for water 215 ft. Globe Oil Co.'s Williams-Laycock 1, making 75 million ft gas at 1915-2080 ft, set 6⅝ cas 2100 ft. Mid-West Exploration Co.'s (was Jim Whittington) Williams-Laycock 3, showing oil, reset 6⅝-inch cas at 2086 ft, td 2130 ft; Williams-Laycock 1-A, rig; G. W. Porter 1, dr up junk 2148 ft. Three-N Oil Co.'s (was Nobles Oil Co.) Williams-Laycock 1, spraying 75 bbls oil 2171-76 ft, dr 2275 ft. J. J. Rook et al's H. C. Phillips 1, dr 950 ft. W. D. Sheddon et al's B. F. Westmoreland 1, sd cas 2000 ft. Texhoma Oil & Ref. Co.'s J. H. Jackson 1, sd to reset 6⅝-inch cas with 1850 ft oil in hole 2241-43 ft; J. H. Jackson 1-A, dr 600 ft. Hal Vaughan & Pendleton et al's P. W. Krev 1, set 8¼ cas 1800 ft. Mid-Way Oil Co.'s Williams-Laycock 1, materials. Jim Whittington et al's O. T. Nicholson 1, traces oil in granite wash pay 2117-2213 ft, dr granite 2455 ft.

Coastal Wildcats

FORT BEND COUNTY—Gulf Prod. Co.'s Moore 4, John M. Moore lease dr 1625 ft. Marland Oil Co. of Texas' H. P. Lockwood 3, sec 3, C. D. Sayre sur, 200 ft to S and E lines, abn 1050 ft. Neilan Oil Co.'s B. Frederick 1, 4½ miles W Rosenberg, sec 19, S. George sur, NW cor, repairs sd. James W. Rich et al's Moore-Hager 2, at Big Creek, 300 ft NE No. 1, SE side of dome, dk and standing. Rycade Oil Corp.'s Flessner 1, 1000 ft S and 150 ft E of NW cor Diedrich-Flessner 200-acre tract, dr at 959 ft in sand rock; Fritz Meier 1, 800 ft E of SW cor and 200 ft N of S line of F. Meier 207.7-acre tract, dr at 2813 ft hard sand and lime; Fritz Meier 2, 1550 ft E of SW cor and 200 ft N of S line of F. Meier 207.7-acre tract, dr 275 ft gumbo. Texas Co.'s G. W. Armstrong 1, James Scott sur, 50 ft to N and W lines SW of Needville, dr 150 ft.

GALVESTON COUNTY — Gulf Prod. Co.'s George E. Smith 3, at High Island, 300 ft E No. 2, digging water well.

HARRIS COUNTY—Texas Co.'s Warren 3, 3 miles S Hockley, 750 ft NW No. 2, dr 3360 ft.

JACKSON COUNTY — Houston Oil Co.'s Rose & Sample 1, 7 miles W Edna, Rose & Sample tract, standing at 2885 ft; Westoff 1, 1659 ft N and 50 ft W of NE cor George Hecht 200-acre tract, Pedro Gallardo sur, preparing to test 2890 ft. Vanderbilt Pet. Co.'s Seliner 1, 4 miles N Vanderbilt, C. W. Hall subdivision of Harwood Burns ranch, dr 2950 ft.

JEFFERSON COUNTY — Gulf Prod. Co.'s E. Thomas A-1, at Fannette, near Hampshire, dr 920 ft.

MATAGORDA COUNTY—Gulf Prod. Co.'s Craig 1, rigging up. Rycade Oil Co.'s Gray 3, at Markham, 1050 ft S of NE cor and 500 ft W of E line, blk 2, W. H. Gray land, dr 949 sand and boulders.

WALKER COUNTY—Big Ridge Oil & Gas Co.'s No. 1, at Weisers Bluff, 14 miles N Huntsville, 12 miles W Riverside, Eastham sur, sd; No. 2, sd; No. 3, 8 miles SW No. 2, between Nelson and South Bedias Creeks, dr 250 ft.

WHARTON COUNTY — Gulf Prod. Co.'s Felder 3, 20 ft to W and 1735 ft to N line, blk 3, S Ingram sur, dr 4550 ft. Texas Co.'s Taylor 2, 1100 ft SE No. 1, at Boling, dr 1175 ft sand.

San Antonio District Wildcats

BEXAR COUNTY—Humble Oil & Ref. Co.'s N. C. Cassin 1, dr 1060 ft; Menchaca 1, dk. Grayburg Oil Co.'s Palfrey 1, dr 1600 ft.

BASTROP COUNTY—Cardinal Oil Co.'s No. 1, dr. C. V. Patton's Glover 1, dr 2200 ft. Quaker Oil Co.'s Howard Smith 1, dr. Jake Jarmon's Watkins 1, sd for water. Commodore Oil Co.'s Zandy Hart 1, dr 1500 ft.

CALDWELL COUNTY — United North & South Oil Co.'s Kelly 1, dr; Brown 1, lcn; Tiller 1, dr; Lee Byrd 1 and 2, dr; Mills Mercer 1, dr; R. S. Shanklin, dr. Glasscock Bros.' H. F. Brewer 1, rigging up. Rio Bravo Oil Co.'s Merriweather 11, set 6⅝-inch casing. Seals Creek Oil Co.'s Inscore 1, dr. Thrasher et al's Field 1, dr. J. G. Pundt et al's Plum Creek 1, lcn. Brownlee et al's No. 2, dr 1200 ft. Gulf Prod Co.'s No. 9, to dr deeper. Cope-Haskell-Mulchay's Beaty 2, lcn. Evans Oil Co.'s Cardwell 1, dk; H. F. Brewer 1, dr. Sun Oil Co.'s Gomillion 18, dr; 19, 20, 21, 22, dks. Magnolia Oil Co.'s J. C Smith 1, dr; Beaty 3, cemented. Armstrong Bros.' Riddle 1, dr 2300 ft in gumbo and shale. J. E. Walsh's Epwright 1, dr below 1940 ft. Humble Oil & Ref. Co.'s Nos. 4, 5, 6, 7, 9, 10, 12 A. F. Brewer, dr. Marland Oil Co.'s F. A. Gomillion 4, 7, 9, 10, dr. Davis-Mitchell's L. H. Cardwell 1, dr 1600 ft. Burt Brookings' A. T. Cardwell 1, dr. E. L. Smith's C. M. Davis 1, dr 2300 ft; (corrected report); 2, dr; Irvin Schroder 3, lcn. Wilford Schroder's Walter Holmer 1, dr 200 ft, preparing to spud in. Bednar's No. 1, dr 1300 ft in serpentine. Randolph & Pope's No. 2, cemented at 1462 ft.

DUVAL COUNTY — Co-Operative Drilling Co.'s Dinn 1, sd 2070 ft. Associated Oil Co.'s Sutherland 1, preparing to spud in. Mesquite Oil Co.'s No. 1, setting liner. Booth Interests' W. R. Peters ranch 1, lcn. O. W. Killam's Benavides 3, dr 2480 ft; 4, dr 1400 ft. Humble Oil Co.'s Pusch 1, plugging. United States Gas & Oil Co.'s Peters ranch 3, rigging up.

GUADALUPE COUNTY — L. K. Hughes Dev. Co.'s Allen 20, no report. Allen Burman's Bailey 1, dr 1900 ft. Magnolia Oil Co.'s Nos. 13 and 14, dr. Jennings et al's Vogel 1, preparing to set 10-inch casing. Stebbins Oil & Gasoline Co.'s Lenz 1, dk. M. O. Rayor's Jessie O. Lipscomb 1, dr. McClannahan's Herman Lenz 1, dr 2000 ft. Roxana Pet. Co.'s Herman Schmidt 1, dk. Joe Dunning et al's Hugo Vetter 1, dr. J. M. Davis et al's Koch 1, sd for water; Augusta Hoese 1, dr 900 ft. Scrivner et al's Henry Shyler 1, dk; Vetter 1, dr 850 ft. York Creek Oil Co.'s Fulshear 1, no report.

JIM HOGG COUNTY — Buchanan-Plateau Oil Co.'s No. 4, set casing. Rydal-Rycade Oil Co.'s W. P. Allen 1, sur 21, dr below 2800 ft. Simms Oil Co.'s Wood 1, sur 84, dr. J. W. Pippin et al's Palacious 2, setting 5 3-16 inch casing. Plateau Oil Co.'s Martinez 5, sd 2066 ft. Daniels & English's No. 1, blk. 8, sur 1617, dr. Texas Co.'s Jennings 1, dr. Buchanan et al's No. 4, dr below 1800 ft. Big Bend Oil Co.'s Martinez 5, cemented 6⅝-inch casing at 2030 ft; 6, dr below 1050 ft. Kitzelman & St. Alban's No. 16, producing 150 bbls; 17, producing 150 bbls. Russell-Hoffman's David Vela ranch 1, dk; Givens 1, rigging up. Mirando Oil Co.'s No. 11, set casing at 2048 ft. San-Tex Oil Co.'s No. 1, sur 262, dr below 1200 ft. Texo Oil Co.'s Lopez 4, dr 1978 ft. Weber Oil Co.'s Holbein 4, dr 3572 ft. Plateau-Texas-Pacific's No. 2, dr; 6, set casing at 2002 ft. Plateau-Wheat's No. 3, dk; 4 and 5, lcns. Elliott-Texas-Pacific's No. 2, dr below 2280 ft.

WEBB COUNTY—Magnolia O. Co.'s Ochoa 16, dr 1700 ft in sandy shale. Door et al's No. 1, blk. 10, dr below 2160 ft. Christine-Sprague et al's No. 1, blk. 13, sur. 1664, setting liner. Marts et al's Reiser 1, dr 2725 ft in sandy gumbo. Plateau Oil & Gas Co.'s No. 1, blk. 15, sur. 26, dr. H. H. Palmer Synd.'s Walker 1, blk. 29, dr below 1700 ft. Ball et al's Puig 1, set 6⅝-inch casing at 1722 ft. Rydal Oil Co.'s Puig 11, dr 1700 ft in shale. Boyd Oil Co.'s Brown 1, dr. Weber Oil Co.'s Holbein 4, dr 2300 ft. T. G. Binney's Garcia 1, sd 1857 ft; 3, setting casing. Iowa-Texas Prod. Co.'s No. 1, dr below 2200 ft. Calumet Pet. Co.'s Servando Benavides 1, dr 2020 ft in sticky shale. Cornhuskers Oil Co.'s No. 3, dr; 5, set and cemented 6⅝-inch casing at 1659 ft; 6, dr 1587 ft. Burton et al's De la Garza 1, down below 2086 ft. Carnahan Prod. & Ref. Co.'s No. 6, fsh 900 ft. Carson et al's No. 1, sur 688, dr. Snodgrass et al's De la Garza 1, set 6⅝-inch casing. Witherspoon Oil Co.'s Lopez 1, dr.

ZAPATA COUNTY—H. J. McMullen's Nos. 1, 2 and 3 Serapio Vela, lcns. R. K. Bateman et al's No. 1, sur 617, dr. Texas Co.'s Cuellar 1, lcn; Jennings 1, rigging up.

Louisiana Wildcats

COMPLETION

Company, Well, Location—	Initial Production Bbls.	Depth
Caddo Parish—		
Stith et al's Pitts 1, 11-25-16	*	575

DRILLING REPORT

BIENVILLE PARISH — Evans & Brown's Miles 1, 20-18-7, coring 2017 ft.

BOSSIER PARISH—Best Oil Co.'s Finouef I, 8-18-12, dr 50 ft. Corbett et al's Murff 1, 18-17-11, dk. Kendrick et al's Webster 1, 9-18-11, dk. Osborne et al's McDade 2, 32-19-11, sd 872 ft. Wilder & Cushman's Lewiston 1, 13-16-12, dr 900 ft.

CADDO PARISH—Dixie Oil Co.'s Dillion 53, 13-21-15, dr 3650 ft; Jolly 1, 27-22-15, dr 3100 ft. Flournoy et al's Simpson 1, 8-16-15, dr 2400 ft. Fortuna Oil Co.'s C. L. B. 2, 8-20-15, to rebuild dk, 2946 ft; Mitchell 1, 17-18-16, dr 2950 ft. Henderson et al's Caldwell 1, 29-22-15, sd 50 ft. Ridge Oil Corp.'s Williams 1, 3-15-15, dk. R. O. Roy & Co.'s Hutchinson 1, 34-16-12, dr 1000 ft. The Texas Co.'s Jeems Bayou 1, 15-20-16, sd 3506 ft. Woodley & Collins' McVea 1, 23-19-14, sd 2580 ft.

CLAIBORNE PARISH — Clark & Melat's Heard 1, 5-21-6, dr 2165 ft. Collins & Woodley's McDonald 1, 26-21-5, dr 1485 ft. Evans & McMurphy's Taylor 2, 5-19-5, dk. Triangle Drilling Co.'s Cox 1, 7-19-5, sd 2735 ft; Brown 1, 1-19-6, rig.

DE SOTO PARISH — Fortuna Oil Co.'s Alexander 1, 32-12-15, dr 2690 ft; Bishop-Robinson 1, 22-11-12, wosr 2992 ft. Gulf Ref. Co.'s Williams C-18, 31-13-11, coring 2340 ft. Tarver et al's Meadows 1, 2-14-10, rig. Ulrey et al's Scott 1, 21-11-12, dr 1650 ft.

GRANT PARISH—Finn Construction Co.'s Ball 3, 14-7-1w, dr 1915 ft.

JACKSON COUNTY—Big Chief Oil Co.'s Rymes 1, 13-14-4w, fsh 2150 ft.

LA SALLE PARISH — Alenandria-Urania Oil Co.'s State 1, 26-10-1e, dk timbers. Davis et al's Russell 1, 24-10-1e, dk. Ford et al's Tullos 1, 23-10-1e, dry 1519 ft. Gould & Monroe Drilling Co.'s Harper 1, 23-10-1e, sw 1496 ft. Heard et al's Boyd 1, 28-11-2e, dk. Helm & Burch's Urania 1, 28-11-2e, to set 6-inch 1392 ft. Imperial O. & G. Co.'s Urania 1, 10-10-1e, dr 1350 ft. Jones & Haywood's Kees 1, 7-10-3e, dk. Love et al's Tremont Lumber 1, 30-10-1e, dk. Mitchell et al's Rich 1, 25-8-4, dk. Bill Rowe's Hardtner 1, 19-10-2e, dr 6-inch plug 967 ft. Urania Pet. Co.'s Urania 7, 19-10-2e, dr 700 ft. Wright et al's Love 1, 16-11-2e, dk.

LINCOLN PARISH—Ruston Drilling Co.'s Richardson 1, 7-18-2w, sd 1100 ft.

OUACHITA PARISH — Dickson & Frue's Goodwin 1, 24-18-2e, sw 2860 ft. Palmer Corp.'s (White) Jones 1, 6-16-5e, dr 6-inch plug 2422 ft.

SABINE PARISH—Emlet et al's Bowman-Hicks 4, 8-7-1w, skidding over; Bowman-Hicks 5, 9-8-12, abn 2633 ft. Toro Pet. Co.'s Wyatt 1, 18-4-11, dr 650 ft.

UNION PARISH—Simms Oil Co.'s Hammock 1, 22-22-ew, dk.

WEBSTER PARISH — Fortuna Oil Co.'s Bible 1, 8-20-9, fsh 2180 ft. Palmer Corp.'s Davis 1, Cotton Valley deep test, 23-21-10, dr 3230 ft.

WINN PARISH—Hall et al's Nagle 1, 6-10-2w, sd 390 ft. Ohio Oil Co.'s Rowland 1, 5-12-1w, dr 650 ft.

Arkansas Wildcats

COMPLETION

Company, Well, Location—	Initial Production Bbls.	Depth
Nevada County—		
Humble Oil & Ref. Co.'s Taylor 1, 11-15-22	*	1330

DRILLING REPORT

BRADLEY COUNTY—The Texas Co.'s Saline Lumber 1, 11-17-10, dr 500 ft.

CALHOUN COUNTY — Klotz & Thomas' Forest City Box 1, 14-16-14, dr 2510 ft. Murdock et al's Eagle Mills 1, 29-12-15, sd for water 1717 ft.

COLUMBIA COUNTY—Arkansas Fuel Oil Co.'s Longino-Goode 1, 14-18-20, dr 2025 ft. Greeson et al's Pearce 1, 3-18-10, dr 1000 ft. Gulf Ref. Co.'s Hines 1, 17-17-18, dr 675 ft. Meier et al's Gantt 1, 15-17-22, dk. Phillips et al's Davis 1, 14-18-21, dr 6-inch plug 2702 ft. Pluto Oil Co.'s Dickens 1, 20-18-22, dk; Robinson 2, 23-18-23, coring 705 ft. Wingfield & Mitchell's Bodcau Lumber 1, 4-20-21, sd 2024 ft.

DREW COUNTY—Graves et al's Karnes 1, 10-13-6, dr 2675 ft. McClintock et al's Ogle 1, 35-13-5, set 10-inch 200 ft. Spooner et al's Meyer 1, 4-16-17, sd 50 ft.

HEMPSTEAD COUNTY—Grassy Lake Oil Assn.'s Gun Club 1, 27-12-27, sd 2100 ft. Tarver et al's Swafford 1, 14-11-25, dr 50 ft. Zingg et al's Sutton 1, 9-11-23, dr 715 ft. Wooten et al's Clarke 1, 22-11-24, sd 2040 ft.

LA FAYETTE COUNTY—Estes & Oliver's Bodcau 1, 13-18-24, dr 1375 ft. Ken-Saw Pet. Co.'s Red River Valley 2, 3-20-24, dr 2450 ft. Humble O. & R. Co.'s Johnson 1, 23-16-25, rig.

LITTLE RIVER COUNTY—Grote et al's Allen 1, 2-13-29, ur 6-inch 2850 ft. Johnson et al's Hawkins 1, 10-11-31, sd 1350 ft.

MILLER COUNTY—Copeland et al's Wiseman 1, 36-15-27, sd for water 1000 ft. Davidson et al's Faulk 1, 27-17-27, dr 65 ft. Gillespie et al's Fee 1, 2-15-26 to resume dr 150 ft. Humble O. & R. Co.'s Goodson 1, 30-16-27, dr 400 ft.

NEVADA COUNTY—Falcon Drilling Co.'s Weaver 1, 6-13-21, rig. Greeson et al's Ellis 1, 2-15-21, rig. Steele et al's Fincher 1, 9-15-22, dk timbers. White et al's Hamilton 34-14-22, sd 1040 ft.

OUACHITA COUNTY — Buffalo Oil Co.'s Morgan 1, 22-15-19, testing 2225 ft, showing oil. Jones et al's Wilson 1, 26-15-18 to test 2313 ft. Lown et al's Burton 1, 30-15-17, dr 2400 ft.

PIKE COUNTY—Strawn et al's Banks 1, 11-8-25, coring 221 ft.

UNION COUNTY—Liberty Oil Co.'s Davis 1, 31-16-14, r 2800 ft. Magnolia Pet. Co.'s Chandler 1, 4-19-14, dr 2690 ft. Ohio Oil Co.'s Arkansas Timber 1, 21-18-10, rig. Ward et al's Goodwin 1, 16-16-14, sdtr 2580 ft.

Oklahoma Wildcats

ALFALFA COUNTY—McGinnis & Ward's No. 1 Watts, C SE NE SW 21-27-10w, sd 3504 ft.

ATOKA COUNTY—Henson et al's No. 1 Dabney, C SE NW 17-4-11w, sd 3475 ft. Wapanucka Dev. Co.'s No. 1 Underwood, C W L SE SE 28-15-10w, sd 1343 ft.

BLAINE COUNTY—Meyers et al's Chronister 1, SEc NW NW 7-18-15w, sd 965 ft. Okomo Oil Co.'s Ekleman 1, SEc 21 15-10w, sd 2610 ft.

BRYAN COUNTY—Alexander's Hampton 1, SEc NE 26-7-11, sd 1400 ft.

CANADIAN COUNTY — Thos. Revelle's Dawson 1, C SE SE NW 20-26-9w, sd 3065 ft. Carrol et al's Setter 1, SEc 2-13-8w, sd 100 ft. C. D. Jones et al's Sanders 1, C NE NE NE 29-11-7w, sd 880 ft.

CLEVELAND COUNTY — Garr Oil Co.'s Holland 1, NEc SE 31-10-4, sd 2620 ft.

GRANT COUNTY—Embry et al's Edwards 1, C SE SE NW 20-26-4, sd 1000 ft. Midwest & Gulf's Moon 1, NEc NW 8-27-8w, sd 2490 ft.

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Frank Travers et al's Fuss 1, SWc NW NW 3-27-4w, sd 1250 ft.

HUGHES COUNTY — Mathers & Skelly's McClain 1, C SW SW 4-5-11, sd 3026 ft. Walton, Snyder & Marshall's King 1, C E L NE NW 6-6-10, fsh 3675 ft. Atkins et al's Sewell 1, C SE SW SW 14-7-9, dr 1678 ft. Parmenter et al's Stewart 1, C SW SE 11-5-8, rig. Henry Greis & Kerr's Pearson 1, C SE NE NE 30-5-10, rig.

JEFFERSON COUNTY—Barker et al's Major 1, C SE SW 34-5-6w, spd and sd. Godley Oil Co.'s Woodworth 1, C NE NW 36-5-4w, sd 1765 ft. Pauline O. & R. Co.'s Graver 1, C NE SW 17-5-8w, dr 1841 ft. Pure Oil Co.'s Howard 1, SWc NE 25-4-11w, dr 620 ft.

KAY COUNTY — Hickman & Barnhard's Sheets 1, C NW SW SE 25-22-2w.

KIOWA COUNTY—Connor et al's No. 2, NEc NW NW 34-7-16w, sd 1200 ft. Alcorn Oil Co.'s No. 1, NEc SE SE SW 13-7-16w, dr 2120 ft. C. E. Reynolds' Smart 1, C E½ SE 12-6-17w, rig.

LINCOLN COUNTY—P. & R. Corp.'s Hanzig 1, NWc SW 14-13-6, dr 2265 ft. Douglas Oil Co.'s Ewing 1, NEc 7-13-3, dr 2430 ft. Eugene Coste & Co.'s Ross-Fortune 1, SEc NW 26-12-2, dr 3945 ft. Wilcox O. & G. Co.'s Smith 1, SEc NW NE 12-12-3, sd 4505 ft. F. O. Howarth's Harris 1, SEc NE 22-15-2, dr 4235 ft. Santrock Drilling Co.'s No. 1, SEc NW 17-15-3, sd 920 ft. Ruby et al's Cull 1, NEc NW 36-15-4, r 3705 ft.

LOGAN COUNTY—Skelly Oil Co.'s Newman 1, NWc NW 32-19-3w, sd 2500 ft. Franklin Oil Assn.'s Moore 1, NWc SE SE 35-7-4w, dr 2531 ft. McMunn & Nixon's Field 1, SWc NE SE 25-7-4w, rig. Haley & Pioneer Pet. Co.'s Quair 1, SWc SE 33-19-3w, sd 270 ft. Blackford O. & G. Co.'s Lair 1, C S L N½ SE 28-16-1w, dr 1300 ft. Magnolia Pet. Co.'s Pritchard 1, NWc 23-15-1e, dr 4090 ft.

LOVE COUNTY — Drillers Syndicate Oil Co.'s Wilson 1, NWc SE 11-7-2, sd 3880 ft. Magnolia Pet. Co.'s Crowe 1, C NE NE SE 13-8-2, dr 2500 ft. Smyer & Stein's Gray, C SE SE 12-9-1, rig. Jackson & Askew's Havenkamp 1, C SW SW NW 27-7-2, dr 1645 ft.

MAJOR COUNTY—Texas Prod. Oil Co.'s Basin 1, SWc 6-22-14w, sd 200 ft. Franz & Slick's Gray 1, C NW 36-21-11w, sd 1000 ft.

PONTOTOC COUNTY—Highland Oil Co.'s Hatcher 1, C NW SW 4-4-5, sd 2285 ft. Dixie Oil Co.'s Moran 1, SW SW NE 33-2-4, dr 610 ft.

POTTAWATOMIE COUNTY — Ossie Oil Co.'s Howell 1, SWc NE 17-10-2, fsh 3363 ft. The Texas Co.'s Allenbaugh 1, SEc SW 3-11-6, sd 810 ft. Davie Detrick's McGathey 1, SEc 10-6-2, sd 3850 ft. H. C. Gwinnup's Floyd 1, SW SE 12-11-3, sd 3655 ft. Pierce Oil Corp.'s Magett 1, NWc 25-10-4, sd 460 ft. McMann Oil Co.'s Heghan 1, SWc NW 19-7-4, sd 100 ft. Halmond Osmond et al's Fiddler 1, SEc NW 4-5-5, sd 545 ft. Central National Oil Co.'s Toney 1, C SW SW SW 28-10-4, sd 750 ft.

ROGER MILLS COUNTY—Twin Hills Oil Co.'s McClure 1, NWc 15-16-26w, sd 4310 ft. Trio Oil Co.'s No. 1, SEc NW SW 3-13-26w, sd 3200 ft.

SEMINOLE COUNTY—Maxwell & Carty's Christie 1, C NE NW 33-6-6, sd 3000 ft. Link Oil Co.'s Caroline 1, C SE NW 14-6-7, sd 2840 ft. Wm. McDougal's Belle Dindy 1, C SE SE 30-6-7, sd 3450 ft. R. F. Garland's Farlin 1, C NE NW 6-6-8, sd 1390 ft. Central National Oil Co.'s Harjo 1, C NE SW NE 14-11-7, sd 3750 ft. Transcontinental Oil Co.'s Davis 1, NE SE 22-7-7, co 3150 ft. Bryan Bros.' Walker 1, C SE SE SE 4-7-6, dr 1465 ft. Riverside & Kinney's Nitley 1, C S½ NE SE 24-5-5, rig.

WOODS COUNTY—Victor Oil Co.'s Van Buskirk 1, SWc SE 10-25-15w, sd 960 ft.

WASHITA COUNTY—Meridian Pet. Co.'s No. 1, SE SE SE 14-9-15w, lcn.

Kansas Wildcats

BARBER COUNTY—R. B. Brown's No. 1 NWc 14-34-11w, dr 2065 ft.

BARTON COUNTY — Cheyenne Oil Co.'s Sooy 1, SWc SW 27-18-12w, sd 3525 ft. Haynes et al's Taul 1, NWc 21-12-12w, sd 3525 ft. John Herron's No. 1, SEc NE 22-18-13w, dr

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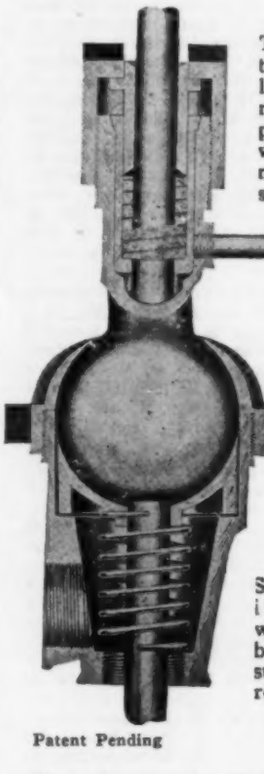

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4155 ft. Huffine et al's Smith 1, C NE SW 21-19-12w, sd 1575 ft.

CLARK COUNTY—Watchorn O. & G. Co.'s Morrison 1, SEc NE NE 20-32-21w, set cas 5300 ft.

CLOUD COUNTY — Livingston's Murdock 1, SEc 6-6-4w, dr 625 ft.

GEARY COUNTY— Liberty-Texas' Wright 1, NEc 9-12-6, sd 750 ft. Liberty-Texas Oil Co.'s Foster 1, NEc SW 3-12-6, sd 2000 ft.

GRAHAM COUNTY—Keyes Bros. & Marine's Thaxton 1, SEc NW 23-8-24w, sd 2000 ft. Gruen & Shiler's Baker 1, NWc SE NW 17-10-24w, rig.

JEFFERSON COUNTY — Northern Counties' Edwards 1, SEc NW NW 13-8-9, sd 3405 ft.

KINGMAN COUNTY—Hale et al's Graber 1, SWc NW 34-27-7w, dr 3365 ft.

LABETTE COUNTY—Ark. Fuel Oil Co.'s Sparks 1, NEc SE SE 14-31-17, sd 1110 ft.

LINCOLN COUNTY—Equite Oil Co.'s Jellison, NWc SE 19-13-9w, set 5-inch 3210 ft. Scott & Collins' Stone 1, SEc SW NE 19-11-6w, sd 500 ft.

MARION COUNTY — Leonard Pet. Co.'s Whaler 1, SEc NE NW 23-10-4, dr 2050 ft.

MITCHELL COUNTY—Wilcox Oil & Gas Co.'s Elders 1, NWc SW NW 23-6-9w, dr 3275 ft.

NEMAHA COUNTY — Nemaha O. & G. Co.'s Meyers 1, NWc 19-3-11, sd 3250 ft.

OSAGE COUNTY — Rodgers & Bittle's Bertha 1, SEc NW 22-17-16, lcn. Mul-Vit Dev. Co.'s Neil 1, NEc NW SW NE 8-17-17, dd 2735 ft. Baker et al's No. 1, C SE SE 3-15-15, sd 260 ft.

RICE COUNTY—Stamey's Barnes 1, SEc NE 21-20-6w, dr 3658 ft. Jasper & Beschka's Walker 1, SWc NE 10-18-6w, co 2200 ft.

RILEY COUNTY—Pawnee O. & G. Co.'s Marks 1, SEc NE NW 26-10-6, sd 2030 ft.

ROOKS COUNTY—Keyes Pet. Co.'s Sandon 1, NWc SW SE 7-8-20w, spd and sd. C. Findeiss et al's Minx, SWc 25-10-19w, dr 2095 ft.

SALINE COUNTY—Thrall et al's No. 1, SEc NE NW 15-15-4w, sd 1010 ft.

SEDGWICK COUNTY — J. H. Liggett's Funk 1, NEc NW 11-26-1, dr 3095 ft. L. E. Craig et al's Mean 1, NWc NW 26-28-1w, r 3605 ft hfw. Curtis et al's Duncan 1, SEc NW NW 19-29-1w, rig. Allison & Fitzwilliams' Webb 1, C NE 21-29-3w, spd and sd.

SEWARD COUNTY — C. T. Dev. Co.'s Woods 1, NWc NE 34-34-34w, sd 700 ft. Seward O. & G. Co.'s Selsey 1, NEc NW 2-33-33, sd 2785 ft.

SUMNER COUNTY—The Texas Co.'s Nixon 1, SWc SE SE 12-35-1, fsh 1475 ft. Foster et al's French 1, NWc 13-31-2, lcn. Phillips Pet. Co.'s Armspiger 1, NWc 17-34-1, sd 3300 ft. Wilcox O. & G. Co.'s Stayton 1, NWc SW 5-32-2w, dr 3360 ft.

TREGO COUNTY—Keyes Pet. Co.'s Davis 1, NEc SW 16-11-25w, sd 3030 ft; Walsh 1, NWc SE 5-11-25w, sd 1450 ft; Walsh 2, SWc SE SW 5-11-25w, sd 1550 ft.

WABAUNSEE COUNTY—Williams et al's No. 1, NEc SW 15-13-12, sd 3600 ft.

WILSON COUNTY — Rhodes & French's Brown 1, NWc SW NW 2-27-14, dr 1060 ft.

WOODSON COUNTY — Mathews et al's Jeffers 1, NWc SE 36-26-15, lcn. Dave Alter et al's Hunt 1, NWc SW 13-25-14, dr 850 ft. Harris et al's Greese 1, NWc SE 35-25-12, lcn.

PERMITS GRANTED FOR NEW WELLS

Weekly Comparison of New Wells

Following is a condensed table giving a comparison of permits or locations made for new wells in Kansas, Oklahoma, Arkansas, Louisiana, Texas and California:

	Number of Wells for Week Ending															
	Mar. 13	Mar. 20	Mar. 27	April 3	April 10	April 17	April 24	May 1	May 8	May 15	May 22	May 29	June 5	June 12	June 19	June 26
Kansas .	24	36	55	34	23	37	38	26	32	32	27	29	44	40	19	29
Oklahoma	94	94	73	115	107	96	82	81	86	94	95	114	106	93	104	115
Arkansas	67	55	80	54	55	34	64	60	49	31	77	62	67	40	64	41
Louisiana	14	14	14	4	9	14	20	7	10	7	12	8	16	18	8	8
Texas . .	210	218	198	187	214	213	215	147	144	208	130	167	221	198	204	206
California	40	24	36	42	26	28	40	27	26	34	29	33	24	33	37	30
Total .	449	441	456	436	434	422	459	348	347	406	370	413	478	422	436	429

CALIFORNIA

Dominguez Field—Shell Co.'s Reyes 29, 33-3-13.

Inglewood Field—Standard Oil Co.'s L. A. Investment 1, 19, 8-2-14. Associated Oil Co.'s Vickers 22, 7-2-14; 24, 7-2-14; 25, 7-2-14. Standard Oil Co.'s L. A. Investment 1, 17, 8-2-14.

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McKittrick Field—Standard Oil Co.'s Weston 3, 25-29-21.

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Rosecrans Field—Hitchcock & Ort's No. 12, 7-3-13. Barnsdall Oil Co.'s Rosecrans No. 6, 20-3-13. P. L. Cooper's No. 1, 7-3-13.

Santa Barbara County Field—James F. Nugent Oil Co.'s No. 2, 33-4-25.

Torrance Field—General Pet. Corp.'s Carson No. 8, 8-4-14. Superior Oil Co.'s Torrance 36, 19-4-13. Shell Co.'s Fenger 4, 9-4-14.

Tulare County Field—Dinuba Oil & Pet. Co.'s No. 1, lot 1 of Orr Subdivision, Dinuba.

Whittier Field—Petroleum Midway Co. Ltd.'s Seward-Rideout 2, 17-2-11.

ARKANSAS

Ouachita County—Arkansas Fuel Oil Co.'s B. T. Laney 5, 31-15-15, 300 ft N and W of SEc NE¼ NW¼. Gulf Ref. Co.'s S. Bennett 4, 32-15-15, 330 ft N and 1120 ft W of SEc NE¼; J. Goodwin A-7, 5-16-15, 2840 ft N and 330 ft W of center. Invader Oil Co.'s Milner 7, 5-16-15, NEc W½ SW¼ NE¼. Natural Gas & Pet. Co.'s Hill A-4, 5-16-15, NEc W½ NE¼ SW¼. Ohio Oil Co.'s Arnold 3, 26-15-16, SWc SE¼ NW¼. Owenwood Oil Corp.'s Snyder 9, 34-15-15, SWc NW¼ SW¼ SW¼. Roxana Pet. Corp.'s Bennett 5, 32-15-15, 200 ft N and W of SEc NE¼ NW¼. Simms Oil Co.'s Hirsch 6, 31-15-15, 200 ft N and W of SEc NE¼ NE¼; F. A. Laney 7, 31-15-15, 330 ft S and W of NEc SW¼ NE¼; F. A. Laney 8, 330 ft N and 150 ft W of SEc SW¼ NE¼. Sinclair Oil Co.'s Berry 10, 33-15-15, SWc NE¼ NW¼. Standard Oil Co.'s H. Murphy 35, 4-16-15, 330 ft S and W of NEc SW¼ SW¼; H. Murphy 36, 330 ft N and W of SEc NW¼ SW¼; Reynolds 1, 21-15-15, 200 ft N & 600 ft W of SEc SE¼ NE¼; Umstead 24, 32-15-15, 200 ft S and 50 ft E of NWc NE¼ SE¼; Umstead 25, 32-15-15, 200 ft S and 495 ft W of NEc NW¼ SE¼; Umstead 26, 200 ft N and E of SWc NW¼ SE¼; Umstead 27, 460 ft S and 200 ft E of NWc SW¼ SE¼; Umstead 28, 32-15-15, 373 ft N and 1420 ft E of NWc SW¼ SE¼; Umstead 29, 473 S and 1270 ft E of NWc SW¼ SE¼; Umstead B-5, 32-15-15, 200 ft N and W of center. Texas Pacific Coal & Oil Co.'s Laney 8, 31-15-15, NEc SE¼ NE¼; McCarvey 2, 32-15-15, NWc SW¼ NW¼. The Texas Co.'s Berry 11, 33-15-15, SEc NW¼ NW¼.

Union County—Arkansas Fuel Oil Co.'s Ferguson 9, 6-16-15, SEc NW¼ SW¼. Gulf 16, 200 ft S and W of NEc NE¼ NW¼. Higgins Oil & Fuel Co.'s McGraw 2, 6-16-16, SWc SE¼ SW¼. Humble O. & R. Co.'s A. Flenniken A-6, 3-16-15, center of east line Lot 2 in NE¼. Laurel O. & G. Co.'s Tatum 4, 7-16-15, NEc of west 30 acres in NE¼ NW¼. Lion O. & R. Co.'s Murphy D-4, 8-16-15, SEc N½ SW¼ SE¼. Pure Oil Co.'s Meriweather 5, 6-16-15, NWc NE¼ SW¼. Rowe-Daniels Synd.'s Tatum 4, 7-16-15, NEc S½ NW¼ NE¼. Shreveport Oil Corp.'s Murphy A-3, 9-16-15, center of West line E½ NW¼ SE¼. Standard Oil Co.'s H. Murphy 34, 4-16-15, 250 ft S and 200 ft E of NWc SW¼ SW¼. Sun Co.'s McClanahan 3, 1-16-16, SEc NE¼ SE¼. The Texas Co.'s Langley 2, 7-16-16, NEc NE¼ NW¼. Thurman et al's Wilson 4, 6-16-15, NWc SE¼ SW¼; Wilson 5, 6-16-15, SWc SE¼ SW¼.

LOUISIANA

Bienville Parish—J. E. Smitherman's Hunt-Hodge Lbr. Co. 1, 8-15n-5w, 330 ft W and 330 ft S of NE Cor. of Sec.

Bossier Parish—G. W. Wetherbee's Wetherbee Fee F-10, 23-19n-11w, 150 ft N and 150 ft E of SW Cor. SE¼ of NE¼.

Calcasieu Parish—M. W. McDowell's Johnson 1, 3-11s-12w, 40 ft S and 30 ft W of NE Cor. of NW¼ of NW¼.

Jefferson Davis Parish—Rycade Oil Corp.'s Calcasieu Nat. Bank 1, 325 ft E of W line of the Calcasieu Natl. Bank 123 acre tract. 340 ft S of the N line of Blk. 3, approximately 1320 ft S of NW Cor. of Calcasieu Natl. Bank's 123 acre tract also a common corner with a certain 2 acre tract cut out of the extreme northwest corner of said bank's tract, same being out of irregular Sec. 14, in the town of Lake Arthur, La.

Grant Parish—J. C. Dowling & C. L. Mc-

Cuts Pulling Cost of one well $549.20 in Single Year

No-Co-Ro Drop and Seat Guarantees Remarkable Saving Regardless of Conditions.

Following is the true pulling-expense record of a carefully operated pumping well before and after NO-CO-RO DROPS and SEATS were installed:

One year with high-grade balls and seats.....$577.20

One year with NO-CO-RO DROPS and SEATS.. 28.00

Saving $549.20

No matter what kind of balls and seats you now use—no matter what service you receive—We guarantee 100 PER CENT GREATER SERVICE thru the use of NO-CO-RO DROPS and SEATS.

NO-CO-RO DROPS and SEATS are so decided an advance in valve check design that after 17 years' close study of valve check conditions we are still being constantly surprised by the records they are making.

NO-CO-RO DROPS and SEATS are made of No-Co-Ro alloy steel; hence they will not pit, rust or corrode. The drop, drilled at the top, is perfectly balanced; unlike a ball, it drops smoothly and accurately week after week—without rattle, flutter or clatter. The broad, perfectly ground seating surface is never exposed to corrosive elements—one reason for the service the DROP and SEAT gives. Long bearing in the crown prevents pounding out of crown wings, lengthening life fully 100 per cent.

If you are interested in cutting costs, you will like NO-CO-RO DROPS and SEATS. Try them at our risk—money back if not satisfied. At your supply house or direct.

NORRIS BROS., Inc.
Manufacturers of Oil Well Pumping Equipment
ROBINSON, ILL.

Frank Travers et al's Fuss 1, SWc NW NW 3-27-4w, sd 1250 ft.

HUGHES COUNTY — Mathers & Skelly's McClain 1, C SW SW 4-5-11, sd 3026 ft. Walton, Snyder & Marshall's King 1, C E L NE NW 6-6-10, fsh 3675 ft. Atkins et al's Sewell 1, C SE SW SW 14-7-9, dr 1678 ft. Parmenter et al's Stewart 1, C SW SE 11-5-8, rig. Henry Greis & Kerr's Pearson 1, C SE NE NE 30-5-10, rig.

JEFFERSON COUNTY—Barker et al's Major 1, C SE SW 34-5-6w, spd and sd. Godley Oil Co.'s Woodworth 1, C NE NW 36-5-4w, sd 1765 ft. Pauline O. & R. Co.'s Graver 1, C NE SW 17-5-8w, dr 1841 ft. Pure Oil Co.'s Howard 1, SWc NE 25-4-11w, dr 620 ft.

KAY COUNTY — Hickman & Barnhard's Sheets 1, C NW SW SE 25-22-2w.

KIOWA COUNTY—Connor et al's No. 2, NEc NW NW 34-7-16w, sd 1200 ft. Alcorn Oil Co.'s No. 1, NEc SE SE SW 13-7-16w, dr 2120 ft. C. E. Reynolds' Smart 1, C E½ SE 12-6-17w, rig.

LINCOLN COUNTY—P. & R. Corp.'s Hanzig 1, NWc SW 14-13-6, dr 2265 ft. Douglas Oil Co.'s Ewing 1, NEc 7-13-3, dr 2430 ft. Eugene Coste & Co.'s Ross-Fortune 1, SEc NW 26-12-2, dr 3945 ft. Wilcox O. & G. Co.'s Smith 1, SEc NW NE 12-12-3, sd 4505 ft. F. O. Howarth's Harris 1, SEc NE 22-15-2, dr 4235 ft. Santrock Drilling Co.'s No. 1, SEc NW 17-15-3, sd 920 ft. Ruby et al's Cull 1, NEc NW 36-15-4, r 3705 ft.

LOGAN COUNTY—Skelly Oil Co.'s Newman 1, NWc NW 32-19-3w, sd 2500 ft. Franklin Oil Assn.'s Moore 1, NWc SE SE 35-7-4w, dr 2531 ft. McMunn & Nixon's Field 1, SWc NE SE 25-7-4w, rig. Haley & Pioneer Pet. Co.'s Quair 1, SWc SE 33-19-3w, sd 270 ft. Blackford O. & G. Co.'s Lair 1, C S L N½ SE 28-16-1w, dr 1300 ft. Magnolia Pet. Co.'s Pritchard 1, NWc 23-15-1e, dr 4090 ft.

LOVE COUNTY — Drillers Syndicate Oil Co.'s Wilson 1, NWc SE 11-7-2, sd 3830 ft. Magnolia Pet. Co.'s Crowe 1, C NE NE SE 13-8-2, dr 2500 ft. Smyer & Stein's Gray, C SE SE 12-9-1, rig. Jackson & Askew's Havenkamp 1, C SW SW NW 27-7-2, dr 1645 ft.

MAJOR COUNTY—Texas Prod. Oil Co.'s Basin 1, SWc 6-22-14w, sd 200 ft. Franz & Slick's Gray 1, C NW 36-21-11w, sd 1000 ft.

PONTOTOC COUNTY—Highland Oil Co.'s Hatcher 1, C NW SW 4-4-5, sd 2285 ft. Dixie Oil Co.'s Moran 1, SW SW NE 33-2-4, dr 610 ft.

POTTAWATOMIE COUNTY — Ossie Oil Co.'s Howell 1, SWc NE 17-10-2, fsh 3363 ft. The Texas Co.'s Allenbaugh 1, SEc SW 3-11-6, sd 810 ft. Davie Detrick's McGathey 1, SEc 10-6-2, sd 3850 ft. H. C. Gwinnup's Floyd 1, SW SE 12-11-3, sd 3655 ft. Pierce Oil Corp.'s Magett 1, NWc 25-10-4, sd 460 ft. McMann Oil Co.'s Heghan 1, SWc NW 19-7-4, sd 100 ft. Halmond Osmond et al's Fiddler 1, SEc NW 4-5-5, sd 545 ft. Central National Oil Co.'s Toney 1, C SW SW SW 28-10-4, sd 750 ft.

ROGER MILLS COUNTY—Twin Hills Oil Co.'s McClure 1, NWc 15-16-26w, sd 4310 ft. Trio Oil Co.'s No. 1, SEc NW SW 3-13-26w, sd 3200 ft.

SEMINOLE COUNTY—Maxwell & Carty's Christie 1, C NE NW 33-6-6, sd 3000 ft. Link Oil Co.'s Caroline 1, C SE NW 14-6-7, sd 2840 ft. Wm. McDougal's Belle Dindy 1, C SE SE 30-6-7, sd 3450 ft. R. F. Garland's Farlin 1, C NE NW 6-6-8-, sd 1390 ft. Central National Oil Co.'s Harjo 1, C NE SW NE 14-11-7, sd 3750 ft. Transcontinental Oil Co.'s Davis 1, NE SE 22-7-7, co 3150 ft. Bryan Bros.' Walker 1, C SE SE SE 4-7-6, dr 1465 ft. Riverside & Kinney's Nitley 1, C S½ NE SE 24-5-5, rig.

WOODS COUNTY—Victor Oil Co.'s Van Buskirk 1, SWc SE 10-25-15w, sd 960 ft.

WASHITA COUNTY—Meridian Pet. Co.'s No. 1, SE SE SE 14-9-15w, lcn.

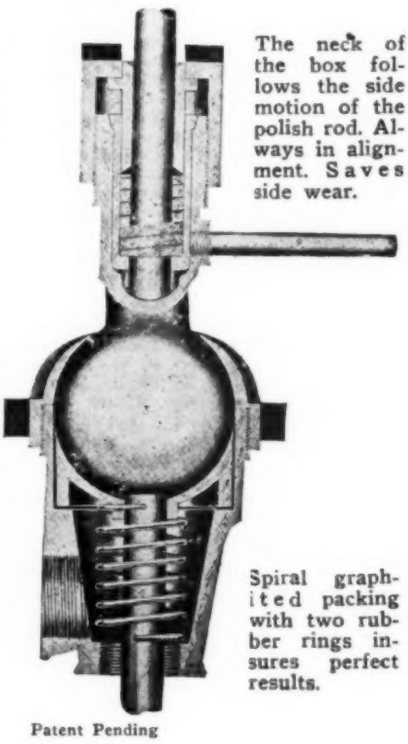
Kansas Wildcats

BARBER COUNTY—R. B. Brown's No. 1 NWc 14-34-11w, dr 2065 ft.

BARTON COUNTY — Cheyenne Oil Co.'s Sooy 1, SWc SW 27-18-12w, sd 3525 ft. Haynes et al's Taul 1, NWc 21-12-12w, sd 3525 ft. John Herron's No. 1, SEc NE 22-18-13w, dr

Taking the Grief Out

With the Fawcett Self-Aligning Stuffing Box in use your sucker rods can be pulled with ease. Absolutely does away with vexatious delays, loss of time and shut-downs.



The neck of the box follows the side motion of the polish rod. Always in alignment. Saves side wear.

Spiral graphited packing with two rubber rings insures perfect results.

Patent Pending

The Fawcett Self-Aligning Stuffing Box does reduce operating costs and does effect a substantial saving in change of packing. Too, loss of production is virtually eliminated.

Some of the largest companies in the field have adopted the Fawcett as standard equipment. Their saving can be your saving. Write for descriptive folder.

George J. Maloney
223 Higgins Bldg. Los Angeles, Calif.
Pacific Coast Distributor

A. W. FAWCETT
Manufacturer
Yale, Oklahoma.

4155 ft. Huffine et al's Smith 1, C NE SW 21-19-12w, sd 1575 ft.

CLARK COUNTY—Watchorn O. & G. Co.'s Morrison 1, SEc NE NE 20-32-21w, set cas 5300 ft.

CLOUD COUNTY — Livingston's Murdock 1, SEc 6-6-4w, dr 625 ft.

GEARY COUNTY— Liberty-Texas' Wright 1, NEc 9-12-6, sd 750 ft. Liberty-Texas Oil Co.'s Foster 1, NEc SW 3-12-6, sd 2000 ft.

GRAHAM COUNTY—Keyes Bros. & Marine's Thaxton 1, SEc NW 23-8-24w, sd 2000 ft. Gruen & Shiler's Baker 1, NWc SE NW 17-10-24w, rig.

JEFFERSON COUNTY — Northern Counties' Edwards 1, SEc NW NW 13-8-9, sd 3405 ft.

KINGMAN COUNTY—Hale et al's Graber 1, SWc NW 34-27-7w, dr 3365 ft.

LABETTE COUNTY—Ark. Fuel Oil Co.'s Sparks 1, NEc SE SE 14-31-17, sd 1110 ft.

LINCOLN COUNTY—Equite Oil Co.'s Jellison, NWc SE 19-13-9w, set 5-inch 3210 ft. Scott & Collins' Stone 1, SEc SW NE 19-11-6w, sd 500 ft.

MARION COUNTY — Leonard Pet. Co.'s Whaler 1, SEc NE NW 23-10-4, dr 2050 ft.

MITCHELL COUNTY—Wilcox Oil & Gas Co.'s Elders 1, NWc SW NW 23-6-9w, dr 3275 ft.

NEMAHA COUNTY — Nemaha O. & G. Co.'s Meyers 1, NWc 19-3-11, sd 3250 ft.

OSAGE COUNTY — Rodgers & Bittle's Bertha 1, SEc NW 22-17-16, lcn. Mul-Vit Dev. Co.'s Neil 1, NEc NW SW NE 8-17-17, dd 2735 ft. Baker et al's No. 1, C SE SE 3-15-15, sd 260 ft.

RICE COUNTY—Stamey's Barnes 1, SEc NE 21-20-6w, dr 3658 ft. Jasper & Beschka's Walker 1, SWc NE 10-18-6w, co 2200 ft.

RILEY COUNTY—Pawnee O. & G. Co.'s Marks 1, SEc NE NW 26-10-6, sd 2030 ft.

ROOKS COUNTY—Keyes Pet. Co.'s Sandon 1, NWc SW SE 7-8-20w, spd and sd. C. Findeiss et al's Minx, SWc 25-10-19w, dr 2095 ft.

SALINE COUNTY—Thrall et al's No. 1, SEc NE NW 15-15-4w, sd 1010 ft.

SEDGWICK COUNTY — J. H. Liggett's Funk 1, NEc NW 11-26-1, dr 3095 ft. L. E. Craig et al's Mean 1, NWc NW 26-28-1w, r 3605 ft hfw. Curtis et al's Duncan 1, SEc NW NW 19-29-1w, rig. Allison & Fitzwilliams' Webb 1, C NE 21-29-3w, spd and sd.

SEWARD COUNTY — C. T. Dev. Co.'s Woods 1, NWc NE 34-34-34w, sd 700 ft. Seward O. & G. Co.'s Selsey 1, NEc NW 2-33-33, sd 2785 ft.

SUMNER COUNTY—The Texas Co.'s Nixon 1, SWc SE SE 12-35-1, fsh 1475 ft. Foster et al's French 1, NWc 13-31-2, lcn. Phillips Pet. Co.'s Armspiger 1, NWc 17-34-1, sd 3300 ft. Wilcox O. & G. Co.'s Stayton 1, NWc SW 5-32-2w, dr 3360 ft.

TREGO COUNTY—Keyes Pet. Co.'s Davis 1, NEc SW 16-11-25w, sd 3030 ft; Walsh 1, NWc SE 5-11-25w, sd 1450 ft; Walsh 2, SWc SE SW 5-11-25w, sd 1550 ft.

WABAUNSEE COUNTY—Williams et al's No. 1, NEc SW 15-13-12, sd 3600 ft.

WILSON COUNTY — Rhodes & French's Brown 1, NWc SW NW 2-27-14, dr 1060 ft.

WOODSON COUNTY — Mathews et al's Jeffers 1, NWc SE 36-26-15, lcn. Dave Alter et al's Hunt 1, NWc SW 13-25-14, dr 850 ft. Harris et al's Greese 1, NWc SE 35-25-12, lcn.

PERMITS GRANTED FOR NEW WELLS

Weekly Comparison of New Wells

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Jefferson Davis Parish—Rycade Oil Corp.'s Calcasieu Nat. Bank 1, 325 ft E of W line of the Calcasieu Natl. Bank 123 acre tract. 340 ft S of the N line of Blk. 3, approximately 1320 ft S of NW Cor. of Calcasieu Natl. Bank's 123 acre tract also a common corner with a certain 2 acre tract cut out of the extreme northwest corner of said bank's tract, same being out of irregular Sec. 14, in the town of Lake Arthur, La.

Grant Parish—J. C. Dowling & C. L. Mc-

BACK OFF

That Stuck Pipe With Edwards Reversing Tool

Coupling for drill stem connection rotates to right
Hinged wings when turned to right open and anchor to casing—causing
The lower part to operate to the left, recovering stuck or twisted off pipe and casing

Can be released at will. Will operate with strain on pipe. Has wide range of adjustment. Makes left-handed pipe unnecessary. Successful operations prove statements.

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At your supply store, or write, phone, or wire.

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Phone Preston 1927
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HOUSTON, TEXAS

Patented—Patents Pending

Curry's Holmes 1, 20-9n-1e, 223 ft E and 200 ft S of NW Cor. NE¼ of NW¼.

Sabine Parish—L. M. Emlet's Bowman-Hicks 6, 8-7n-12w, 840 ft S and 509 ft E of NW Cor. SW¼ of NE¼.

Webster Parsh—Standard Oil Co. of La.'s Sidney Jackson 1, 27-21n-10w, 330 ft S and 330 ft E of NW Cor. SE¼ of SW¼.

TEXAS

Archer County—White Eagle Oil & Ref. Co.'s, Wichita Falls, L. F. Wilson 1, B 75, Amer. Trib sur, 4450 ft to N and 150 ft to E line. Norday Oil Co.'s, Wichita Falls, J. L. Anderson 2, B 21, S. Anderson sur, 300 ft W No. 1; 3, same sur, 300 ft E No. 1. S. McGregor's, 1613 Lucille St., Wichita Falls, L. H. Farmer 4, C. Winters sur, 300 ft W of No. 3. Geo. R. Slentz's, Burkburnett Bldg., Ft. Worth, R. O. Prideaux 1, J. Dorsey sur, 150 ft to S and E lines. Phillips Petroleum Co.'s, Bartlesville, Okla., J. L. White 75, B 35, Amer Trib sur, 150 ft to E and 705 ft to S line; 77, same sur, 450 ft to E and 1298 ft to S line. Prairie Oil & Gas Co.'s Ranger, Texas, J. F. Kovar 1, 2438 TE&L sur, 150 ft to N and E lines; L. F. Wilson 14, B 27, Amer Trib sur, 340 ft N No. 6. Magnolia Pet. Co.'s, Dallas, N. Wilborn 4, 1597 TE&L sur, 150 ft to N and 350 ft to E line; J. F. Rogers 5, 2406 TE&L sur, 300 ft N No. 3. Texas Co.'s, Wichita Falls, J. L. Anderson 1, S A. R. Subdiv., 150 ft to S and W lines; M. E. Rogers 7, 1600 TE&L sur, S of No. 5. J. J. Perkins et al's, Box 1020, Wichita Falls, J. L. Anderson 1, S. Anderson sur, 150 ft to W and 750 ft to S line. 66 Oil Co.'s, First Natl. Bank Bldg., Wichita Falls, L. F. Wilson 10, No. 4 S. P. Ry sur, 510 ft to W and 560 ft to S line. Shappell Oil Co.'s, Wichita Falls, J. L. Jackson 22, B 23, D. C. S. L. sur No. 4, 300 ft N No. 21-A. Sun Oil Co.'s, Dallas, L. F. Wilson 1, Amer Trib sur. Empire Gas & Fuel Co.'s, Staley Bldg., Wichita Falls, J. L. Anderson 1, S 21, S. Anderson sur, 150 ft to N and 491 ft to E line. McCarty Oil Co.'s, Bob Waggoner Bldg., Wichita Falls, L. F. Wilson 6, E. Hall sur, 20 ft N No. 5. Smith & Trahan's, Morgan Bldg., Wichita Falls, J. J. Perkins 2, B 3, D. C. S. L. sur, 150 ft to S and E lines. Texas Co.'s Wichita Falls, J. T. Richardson 5, S. Anderson sur, 500 ft to N and W lines. Davis-Hart Co.'s Staley Bldg., Wichita Falls, Roach & Junker 12, 1594 TE&L sur, 750 ft to E and 202 ft to S line. S. W. Richardson's Waggoner Bldg., Wichita Falls, R. Campbell 1-A, 1373 TE&L sur, 150 to N and E lines. Roy I. Carter's, City Nat. Bank Bldg., Wichita Falls, J. R. Parkey 1, S 11, H&TC Ry sur, 150 ft to N and E lines. Ruff & Weekley's, City Nat. Bank Bldg., Wichita Falls, T. B. Wilson 1, S 10, H&TC Ry sur, 150 ft to N and W lines. T. G. Lomax's City Nat. Bank Bldg., Wichita Falls, L. F. Wilson 1, B 88, Amer Trib sur, 750 ft to N and 150 ft to E line. Weldon & Lowry, Olney, J. L. Anderson 1, B 19, S. Anderson sur, 150 ft to N and E lines. R. R. Robertson's, Box 434, Wichita Falls, A. J. Lowe 12, B 2, I. Holman sur, 300 ft S No. 9.

Baylor County—Ray & Massie's, Staley Bldg., Wichita Falls, W. B. Mills 1, 3137 TE&L sur, 150 ft to N and E lines. Cranfill Bros. Oil Co.'s, Waggoner Bldg., Wichita Falls, W. B. Mills 4, 2413 TE&L sur, 150 ft to N and 450 ft to E line. Gulf Prod. Co.'s, Ft. Worth, W. B. Mills 1, 2428 TE&L sur, 150 ft to S and E lines

Bastrop County — Simms Oil Co.'s, Dallas, B. H. Smith 1, A. Litton sur, SW cor. Geo. W. Lyles, 5130 Reiger Ave., Dallas, J. S. Spooner 1, L. Leverence sur, 5060 ft to N and 150 ft to W line.

Brown County — Prairie Oil & Gas Co.'s, Ranger, J. W. Newton 11, No. 149 W. M. Miller sur, 563 ft W No. 10. L. F. Mendenhall et al's, Cross Cut, J. W. Newton 6, Wm. Miller sur, 150 ft to N and 450 ft to E line; 7, same sur, 450 ft to W and 150 ft to S line.

Bexar County—Geo. Klemcke's, Box 59, Van Ormy, F. W. Klemcke 3, No. 332 sur, 130 ft to S and E lines. Grayburg Oil Co.'s San Antonio, Mrs. L. W. Palfrey 1, 150 ft to S and 450 ft to E line

Callahan County—Mook, Wakefield & Canyon Oil & Gas Co.'s, Cross Plains, Mrs. L. A. McDonough 1, Jas. Knight sur, 150 ft to N and 1500 ft to E line. Parkersburg Drilling Co.'s, Box 19, Cisco, L. H. Qualls 26, 2299 TE&L sur, 400 ft N No. 12; 25, same sur, 400 ft N No. 22. L. A. Warren et al's, Box 272, Cisco, W. M. Isenhour 2, S 6, Bayland Asy sur, 300 ft N No. 1; Diller 1, S 49, Bayland Asy sur, 150 ft to N and W lines; 2, same sur, 300 ft E No. 1; 3, same sur, 300 ft E No. 2. J. A. Nellis', Box 272, Putnam, Mrs. A. S. Lobban 8, 2995 TE&L sur, east of No. 4. Shackleford Oil Co.'s, Putnam, J. A. Shackleford 19, 2270 TE&L sur, 1800 ft to S and E lines. J. F. Williams et al's, Daniels Hotel, Cisco, R. L. Buchanan 4, S 8, Bayland Asy sur, NW Cor. Frank Nickel's, Cisco, M. Kennedy 4, S 11, Bayland Asy sur, 600 ft W No. 2. Moutray Oil Co.'s, Cisco, T. H. Weddington 11, S 4, Bayland Asy sur, 300 ft NE No. 4. Harwell Bros.', 410 Osage St., Abilene, L. D. Harwell 1, S 10, Bayland Asy sur, 500 ft to E and 200 ft to S line. R. N. Hamilton's, Cisco, R. S. Brain 1, 2284 TE&L sur, 375 ft to E and 340 ft to S line. Electra-Callahan Oil Co.'s, Electra, J. H. Ogle 8, 2297 TE&L sur, 450 ft to E and 150 ft to N line; 9, same sur, 150 ft to W and 750 ft to N line. Dickey & Lay's, Putnam, J. H. Ogle 1, 2297 TE&L sur, 450 ft to E and 800 ft to S line. E. W. Boyd's, Box 365, Putnam, J. C. McDermett 1, S 184, W. Helms sur, 150 ft to N and W lines. R. H. Fechner's, San Antonio, Eubanks 2, 2039 TE&L sur, 300 ft S No. 1. Henseleit & Lacey's Cisco, J. A. Miller 1, B 50, C. C. S. L. sur, 150 ft to N and E lines. Kleiner Bros.', Cisco, J. L. Woods 2, 2277 TE&L sur, 250 ft to N and W lines. Ed. Muir et al's, Webb City, Okla., A. H. Wagley 1, 2670 TE&L sur, 300 ft to W and 150 ft to S line. St. Mary's Oil & Gas Co.'s Moran, L. H. Qualls 16, 2287 TE&L sur, East Central. Ungren, Frazier & Snyder's, Putnam, Diller Bros. 1, S 53, L. A. L. sur, SW Cor. Westheimer & Daube's, Ardmore, Okla., J. S. Hart 2, S 7, D&D Asy sur, 150 ft to W in center of line; M. [illegible] M. Williams 1, S 65, Bayland Asy sur, 150 ft to N and 700 ft to W line. Goodloe & Harris', Putnam, S. M. Davis 20, S 4, Bayland Asy sur, west of No. 19. S. J. Price et al's, 727 Essex St., Ft. Worth, C. K. Peak 1, 3154 TE&L sur, 450 ft to E and 150 ft to S line. Stalker & Kors', 512 West 18th St., Cisco, R. A. Park 1, 3194 TE&L sur, 1525 ft to E and 150 ft to S line.

Coleman County—Shaw, Fox & Adams', Burkett, Texas, Wm. Key 1, A. Wickson sur, 150 ft to N and 680 ft to E line. Canyon Oil & Gas Co.'s, Cross Plains. J. W. Harris 1, J. Sanders sur, 3630 ft to W and 5280 ft to S line. M. E. Wakefield's, Cross Plains, W. M. Key 3, A. Wickson sur, 300 ft W No. 2. Ilseng Prod. Co.'s, Inc., F. & M. Bank Bldg., Ft. Worth, Neff 1, S 173, 300 ft to W and 500 ft to S line. Canyon Oil & Gas Co.'s, Cross Plains, W. T. Burns 7, Wm. Mason sur, 150 ft to S and E lines.

Crockett County—Crockett Drilling Co.'s, Big Lake, J. M. Shannon 2, S 9, GC&SF Ry sur, 300 ft to E and 1020 ft to S line. Jacobs & Williams', Colorado Springs, Colo., P. I. Childress 1, S 5, B 39, 236 ft to E and 495 ft to S line.

Clay County—L. M. Emlet's, 6625 Delmar Blvd., St. Louis, Mo., Panhandle 10, B 47, P. C. S. L. sur, 714 ft to E and 150 ft to S line.

Caldwell County—J. B. Pope's, Austin, C. H. Beaty 2, J. Burleson sur,, 150 ft to S and E lines; 1, same sur, 150 ft to N and E lines. United North & South Oil Co.'s, Luling, R. S. Shanklin 1, Jno. Henry sur, 155 ft to S and E lines. Gulf Production Co.'s, Houston. F. A. Gomillion 11, P. Martinez sur; Buford-Palmer 1, P. Martinez sur, 50 ft to S and W lines. Sun Oil Co.'s, Dallas, A. H. Gomillion 24, P. Martinez sur, 300 ft SW No. 21; 25, same sur, 300 ft SW No. 22. Quaker Oil Co.'s, Wichita Falls, Mrs. H. E. Palmer 6, F. Castillo sur, south of No. 4. E. Constantin Jr.'s, City Nat. Bank Bldg., Wichita Falls, A. T. Cardwell 1, Castillo sur, 150 ft to N and W lines; 2, same sur, 300 ft E No. 1. Payne & Bond's, Magnolia Bldg., Dallas, Mrs. C. T. Schawe 1, T. Maxwell sur, 150 ft to N and 196 ft to E line. M. O. Rayor's, Luling, Mrs. J. O. Lipscomb 1, Morris sur, 700 ft to W and 500 ft to S line.

Duval County—Humble Oil & Ref. Co.'s,

Houston, Walsh 4, No. 185, J. Poitevent sur, 3000 ft to S and 2000 ft to W line.

De Witt County—Cuero Oil & Gas Co.'s, Cuero, Wm. Holzapfel 1, Brooks Lge., 200 ft to W and 650 ft to S line.

Eastland County—J. T. Anderson et al's, Cisco, Mrs. B. F. Moody 1, D. W Bint sur, SW cor. Pettit & Adkisson's, Magnolia Bldg., Dallas, B. S. Walker 1, S. J. Robinson sur, 1500 ft to E and 500 ft to S line. Shackleford Oil Co.'s, Putnam, L. H. Qualls 16, 2270 TE&L sur, 1450 ft to E and 450 ft to S line. States Oil Corp.'s, Eastland, J. W. Henderson 4, S 8, H&TC Ry sur, 775 ft to W and 700 ft to S line. Dyar Bros.', Box 1265, Ranger, Mrs. L. A. Bashan 1, S 5, H&TC Ry sur, 160 ft to N and W lines.

Fort Bend County—Union Sulphur Co.'s, Humble Bldg., Houston, T. W. Davis 29, M. Young sur.

Glasscock County — Gulf Production Co.'s. Houston, L. S. McDowell 2, S 30, B. 34, T&P Ry sur, East central.

Hardin County—Ada Belle Oil Co.'s, Box 103, Batson, Paraffine 96, J. Knight sur, 1906 ft to E and 50 ft to S line.

Harrison County—Lyons, Shaw, Becker & McElroy's Ardis Bldg., Shreveport, La., J. S. Bryson 1, T. D. Wilson sur, 200 ft to N and E lines. Irick Oil Co.'s, of Ohio, Waskom, S. Abercrombie 1, R. W. Bedford sur, 170 ft to W and 400 ft to N line. State Line Oil & Gas Co., Inc.'s, Box 202, Shreveport, La., J. W. Furrh 1, W. H. Adams sur, 585 ft to W and 287 ft to N line. Simms Oil Co.'s, Dallas, A. L. Webster 1, E. H. Jenkins sur, center. R. C. Burkhart, Box 272, Homer, La., Heard 1, E. M. Jenkins sur. Mississippi-Waskom Gas Co.'s, Hattiesburg, Miss., A. J. Downs 1, Jas. Adams sur, 200 ft to S and W lines. C. H. Lyons, Ardis Bldg., Shreveport, La., J. M. Lee 1, J. Lipscombe sur, center.

Harris County—Martin Pet. Co.'s, Humble, Long 26, Jas. Strange sur, 25 ft to N and 125 ft to W line. Humble Oil & Ref. Co.'s, Houston, Simms-Smith 63, Wm. Scott sur, 150 ft S No. 21; 64, same sur, 100 ft N No. 38.

Hill County—J. C. Pool's Hubbard, E. L. Hammer 1, W. W. McFall sur, 160 ft to E and 2058 ft to S line.

Jefferson County—Gulf Prod. Co.'s, Houston, Gladys 208, A. Veatch sur, 987 ft to N and 240 ft to W line Blk 28. M. J. Kornegay's, 335 Adams Ave., Beaumont, G. W. Armstrong 1, J. A. Veatch sur, NE cor.

Jim Hogg County—Kirkpatrick & Lucas', Box 158, Laredo, R. Holbein 1, S 12, B 7, Las. Animas sur, 150 ft to W and 1300 ft to N line.

Kaufman County — Humphreys-Kirby-Cranfill's, Magnolia Bldg., Dallas, M. J. Tharp 1, G. P. Dikes sur, 150 ft to W and 495 ft to S line.

Liberty County — Texas Co.'s, Houston, Simms Fee 7, D. Minchey sur, 100 ft E No. 4. Yount-Lee Oil Co.'s, Beaumont, W. W. Merchant 13, J. Devore sur, 253 ft to E and 269 ft to N line.

Live Oak County—Rice & Carter's, Corpus Christi, C. E. Tips 1, C. R. Tips sur, 150 ft to W and 990 ft to S line.

Milam County—Hope Petroleum Co.'s, Rockdale, H. A. Branch 1, T. J. Chambers sur, 750 ft to N and W lines. Fritz Fuchs' Taylor, J. W. Roark 1, T. J. Chambers sur, 150 ft to N and E lines; 2, same sur, 155 ft to S and E lines; 3, same sur, 155 ft to S and W lines; 4, same sur, 155 ft to N and W lines. Bowman Oil Co.'s, Rockdale, W. E. Gaither 2, Chambers & Arnet sur, NE cor.

Navarro County—Gulf Prod. Co.'s, Houston. M. Hillburn 2, Wm. Hudson sur, 150 ft to S and W lines. Atlantic Oil Prod. Co.'s, Dallas, M. Talley 1, 150 ft to W and 200 ft to N line. Sun Oil Co.'s, Dallas, H. A. Swink 1, M. Boren sur, 150 ft to S and W lines. Humble Oil & Ref. Co.'s, Houston, G. C. Kent 19, J. Smith sur, 348 ft to W and 1275 ft to S line; 20, same sur, 450 ft N No. 19; 21, same sur, 450 ft S No. 19; S. D. Ramsey 15, same sur, 255 ft N No. 6; 16, same sur, 255 ft N No. 15; 17, same sur, 255 ft N No. 16. Neil Erwin's, Dallas, W. Goldman 1, J. Lockhart sur, SW cor.

Orange County—Gulf Prod. Co.'s, Houston, L. T. Grubbs 2, Wm. Dyson sur, 440 ft to N and 50 ft to E line. Humble Oil & Ref. Co.'s, Houston, Chesson 22, Wm. Dyson sur, 150 ft N No. 17.

Palo Pinto County—R. B. Pender's, Denton, J. W. Slemmons 3, S 45, T&P Ry sur, 300 ft to S and E lines.

Reagan County—Gulf Prod. Co.'s, Houston, State-Campbell 2, S 1, B 1, Univ. Lands sur, 330 ft to S and 1320 ft to E line. Big Lake Oil Co.'s, Best, University 43, S. I. B 2, same sur, 496 ft NE No. 23; 44, same sur, 520 ft SE No. 23; 45, same sur, 573 ft NE No. 24; 46, same sur, 456 ft SE No. 24.

Shackleford County — H. Spurgeon et al's', Moran, R. A. Elliott 1, S 5, Bayland Asy. sur, 450 ft to W and 1300 ft to S line. J. S. Dennis', Moran, J. J. Pettus 2, S 15, Univ. Lands sur, 150 ft to N and W lines. Phillips Pet. Co.'s, Bartlesville, Okla., J. A. Parrish 7, S 47, Blind Asy sur, 500 ft S No. 4. Texas Co.'s, Breckenridge, S. S. Diller 17, S 49, L. A. L. sur, 600 ft W No. 18; 18, same sur, 150 ft to N and E lines. Landreth Prod. Corp.'s, Breckenridge, S. S. Diller 1, S 49, L. A. L. sur, 150 ft to N and W lines. G. L. Lyda et al's, Putnam, M. J. Leach 2, S 40, L. A. L. sur, 200 ft to S and 150 ft to E line. Humble Oil & Ref. Co.'s, Houston, W. McLemore 1, L. Miller sur, west central. Graham & Lash's, Moran, J. T. Cockrell 10, S 15, L. A. L. sur, 450 ft to N and 300 ft to E line. Hope Pet. Corp.'s, Exchange Nat. Bank Bldg., Tulsa, Okla., W. D. Reyolds 3, S 24, T&P Ry sur, 495 ft to N and 165 ft to E line; 4, same sur, 165 ft to N and 495 ft to E line; 5, same sur, 1165 ft to N and 165 ft to E line. M. E. Sommer's Box 604, Moran, J. T. Wild 3, B 72, L. A. L. sur, 300 ft W No. 1; 4, same sur, 300 ft N No 1. H. Spurgeon et al's, Moran, R. A. Elliott 2, S 5, Bayland Asy sur, 450 ft to E and 1300 ft to S line. Texas Co.'s Breckenridge, S. S. Diller 19, S 49, L. A. L. sur, 240 ft E No. 15. Johnson, Chaney & Winston, Moran, E. L. Anderson 1, S 65, L. A. L. sur, 500 ft to W and 2000 ft to S line. F. Blackwell's, Ranger, Diller Bros. 1, S 43, L. A. L. sur, 450 ft to N and E lines. Phillips Pet. Co.'s, Bartlesville, Okla., C. R. Phillips 2, S 49, Blind Asy sur, 800 ft to N and 600 ft to E line.

Stephens County—Texas Pacific Coal & Oil Co.'s, Ranger, C. C. Jackson 1, S 1, T&NO Ry sur, SE cor.

Throckmorton County — A. W. Johnston's, Box 85, Graham, J. M. Batdilor 2, 2104 sur, 150 ft to S and E lines. Texhoma Oil & Ref. Co.'s Wichita Falls, Reynolds Cattle Co. 283, 3, B 57, Comanche sur, 600 ft SE No. 3.

Wichita County—W. L. Mann's, 710½ Ohio St., Wichita Falls, Roller Est. 6, J. Mumford sur, 300 ft S No. 3; 7, same sur, 150 ft W in center of line. Petroleum Prod. Co.'s, City Nat. Bank Bldg., Wichita Falls, Kemp & Allen 6, B 27, W V. F. L. sur, 300 ft S No. 4. Maer & Staniforth's, City Nat Bank Bldg., Wichita Falls, J. A. Kemp 6, B 27, W. V. F. L. sur, 300 ft N No. 4. Island Oil Co.'s, Wichita Falls, Kemp & Kempner 11, B 48, W. V. F. L. sur, 300 ft E No. 9. Roy I. Carter's, City Nat. Bank Bldg., Wichita Falls, Kemp & Kempner 5, B 53, M Tigert sur. 410 ft S No. 3. E. S. Easton, Box 665, Wichita Falls, W. T. Waggoner 1, A. Gibson sur, 450 ft to N and 150 ft to E line. W. E. Timbline et al's, Wichita Falls, H. Willis 4, BBB&C Ry sur, 150 ft to N and 450 ft to W line. J. L. Swanner's, Box 168, Wichita Falls, Williams & Parker 1, B 15, P. P. C. S. L. sur, 1170 ft to S and E lines. Petroleum Prod. Co.'s, City Nat. Bank Bldg., Wichita Falls, Kemp & Kempner 1, B 54, W. V. F. L. sur, 150 ft to N and E lines. Virginia Oil Assn.'s, Box 344, Wichita Falls, T. L. Burnett 1, S 7, HT&B Ry sur, 150 ft to N and E lines. Craig & Mason's, Worth Bldg., Fort Worth, S. L. Dennis 6, B 27, Cowherd Bros sur, 300 ft W No. 1. W. H. Hammon et al's, City Nat. Bank Bldg., Wichita Falls, S. H. McCarty 6, W. R Eaves sur, 300 ft NE No 2; 7, same sur, 300 ft NE No. 1; 8, same sur, 150 ft to N and E lines. P. J. White et al's, City Nat. Bank Bldg., Wichita Falls, S. H. McCarty 1, W. R. Eaves sur, 150 ft to S and W lines Ascot Co.'s, Wichita Falls, J. E. Roller Est. 18, W. A. Grady sur, 700 ft to E and 150 ft to N line. Arthur & Robinson's, Kirby Bldg., Wichita Falls, J. E. Roller Est. 10, W. A. Grady sur, 450 ft to N and 150 ft to W line. W. W. Chambers', Box 182, Burburnett, C. Birk 1, W. J. Smith sur, 150 ft to N and 450 ft to E line. R. C. Parker's, 2003 Kemp Blvd., Wichita Falls, P. Browning 3, No. 7 GEL Co. sur, 300 ft N No. 2. Ferguson, Hawkins & Hester's, Staley Bldg., Wichita Falls, J. A. Watkins 9, No. 46 W. V. F. L. sur, 100 ft S No. 3. Rio Bravo Oil Co.'s, S. P. Bldg., Houston, Fee C2G, S 31, H&TC Ry sur, 800 ft to N and 250 ft to E line; A11G, same sur, 250 ft to N and W lines; C3D, same sur, 1300 ft to N and 250 ft to E line.

Wilbarger County—Independent Oil & Gas Co.'s F. & M. Bank Bldg., Fort Worth, W. M. Reed 1, S 33, H&TC Ry sur, 150 ft to S and E lines. E. L. Brookins', Austin Hotel, Austin, Waggoner 1, S 26, H&TC Ry sur, 150 ft to S and E lines. Ray & Massie's, Staley Bldg., Wichita Falls, Bond, Hawkins & Williams 3, S 100, H&TC Ry sur, 250 ft W No. 2. Landreth Production Co.'s, Breckenridge, W. T. Waggoner 1, S 43, H&TC Ry sur, 150 ft to N and E lines. South Vernon Oil Co.'s, Vernon, Texas, C. Zipperle 4, S 84, H&TC Ry sur, west of No. 3. A. G. Holmes & Texhoma Oil & Ref. Co.'s, Wichita Falls, W. B. Covert 2, S 7, H&TC Ry sur, 150 ft to N and E lines. E. B. Lawson's, Nowata, Okla., Waggoner Est. 9, S 99, H&TC Ry sur, 300 ft N No. 4; 11, same sur, 300 ft N No. 8.

Young County—Hamilton & Wilson's, Waggoner Bldg., Wichita Falls, H. Haygood 4, 237 TE&L sur, 301 ft to S and W lines. Texas Unity Oil Co.'s, Morgan Bldg., Wichita Falls, J. Hausler 2, S 1, J. Poitevent sur, 300 ft W No. 1; 3, same sur, 750 ft to E and 150 ft to S line. A. Minnet's, Archer City, S. Graham 1, D. Dawson sur, 1450 ft to N and 3238 ft to W line. Humble Oil & Ref. Co.'s, Wichita Falls, I. E. Mercer 2, J. Poitevent sur, 300 ft E No. 1; 3, same sur, 300 ft E No. 1. A. A. Cooper et al's. Olney B. F. Haygood 1, 1368 TE&L sur, 150 ft to N and E lines. F. H. E. Oil Co.'s, Staley Bldg., Wichita Falls G. W. Dunagan 4, 170 TE&L sur, 300 ft S No. 1; 3, same sur, 300 ft W No. 2. C. Mooer's, City Nat. Bank Bldg., Wichita Falls, J. F. Smith 1, 82 TE&L sur, 150 ft to N and E lines. E. B. Madden's, Olney, G. M. Boren 1, R. D. Newman sur, 450 ft to S and E lines. M. R. Hemphill's, Graham, M. V. Keller 1, 1103 TE&L sur. E. S. Stovall's, Graham, Fee 4, B 30, Jas Tobin sur, SE cor.

KANSAS

Butler County—Vickers and others' Powell 1, northwest corner of the southeast of 12-23-6. Hunkle and others' No. 1 Bittler, northwest corner of the southwest of 29-26-9 C. A. Boyle and others' No. 1 Taber, northeast corner of the southwest of the southeast of 22-27-7.

Cowley County—Marland Oil Co.'s No. 1 Holman, northwest corner of the southwest of 19-33-3.

Elk County—Anderson Bros.' No. 3 Smith, northeast of the southeast of 21-29-9. Watchorn Oil & Gas Co.'s No. 7 Duxton, southwest corner of the norheast of the northwest of 3-30-9.

Greenwood County—Skelly Oil Co.'s No. 4 Kipfer, southeast corner of the northeast of the northwest of 13-22-10. Ritchey & Moore's No. 11 Green, southeast corner of the southwest of the northeast of 11-22-10. Noble Oil & Gas Co.'s No. 1 Voorhees, southwest corner of the southeast of the southwest of 1-22-11. Phillips Petroleum Co.'s No. 1 Pees, southeast corner of the southwest of the southwest of 29-22-11. York State Oil Co.'s No. 6 "C" De Malorie, northeast corner of the northwest of the northwest of 32-22-11. Braden Bros.' No. 3 Miller, southwest corner of the northwest of the northeast of 27-22-12. Roberston, Hay and others' No. 2 Scott, northeast corner of the southeast of the northeast of the northeast of 25-23-8; No. 3 Scott, northwest corner of the northeast of the northeast of 25-23-8. Allen and others' No. 1 Burk, northeast corner of the northwest of 36-23-8. Transcontinental Oil Co.'s No. 111 Green, southeast corner of the southwest of 2-23-9. Greenland Oil Co.'s, No. 11 Green, northeast corner of the southeast of the north-

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When the rod is broken at the joint, the corrugated (die) bowl can be screwed on to make the pick-up.

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east of 10-23-9; No. 12 Green, southwest corner of the northeast of the northeast of 10-23-9. Sheedy and others' No. 4 Green, northwest corner of the northeast of the northwest of 11-23-9. Mission Oil Co.'s No. 2 Dales, northwest corner of the southwest of the northwest of the northwest of 30-23-9. Polhamus and others' No. 10 Marshall, center of the south line of the southeast of the southwest of 34-24-9. Texas Co.'s No. 1 Wiggins, northwest corner of the northeast of the southeast of 30-24-11. Enterprise Develoment Co.'s No. 1 Thrall, northeast corner of the southeast of the southwest of 7-24-12. Lima Iola Oil Co.'s No. 4 Johnson, southwest corner of the northeast of the southwest of 15-24-12. Skelly Oil Co.'s No. 4 Johnson, northeast corner of the southwest of the northeast of 15-24-12. Bisagno and others' No. 7 Gilroy, center of the west line of the southeast of the northwest of the northeast of 6-25-13.

Woodson County—Marland Oil Co.'s No. 8, Hessler, southeast corner of the northwest of the southwest of 23-25-13. Pure Oil Co.'s No. 12 Headley, southwest corner of the southeast of the southeast of 32-23-14. Iowa Kansas Development Co.'s No. 3 Stockerbrand, southwest corner of the northwest of the northwest of 1-24-14.

OKLAHOMA

Kay County—Wentz Oil Corp.'s No. 1 School land, center of the southwest of the southwest of the southwest of 16-29-1w. Joe Cain's No. 1 Townsite, Blk. 2, Lot 23, 8-28-1w; No 1. Townsite, Blk. 22, Lot 22, 8-28-1w. Broadhurst and others' No. 1 Townsite, Blk. 3, Lot 12, 8-28-1w. Benedum-Trees' No. 1 Townsite, Blk. 12, Lot 27, 8-28-1w. Windle and others' No. 1 Townsite, Blk. 15, Lot 28, 8-28-1w. Wells & Wade's No. 1 Townsite, Blk 21, Lot 7, 8-28-1w. Mississippi Valley Oil Co.'s No. 1 Butler, center of the northeast of the northeast of the northeast of 22-27-2e. Gypsy Oil Co.'s No. 2 Herbig, center of the northwest of the northwest of the southeast of 15-25-2w; No. 3 Herbig center of the southeast of the southwest of the southeast of 15-25-2w. Marland Oil Co.'s No. 3 Thomas, center of the northwest of the northwest of the southwest of 15-25-2w. Cosden Oil & Gas Co.'s No. 2 School land, center of the southwest of the southeast of the northeast of 16-25-2w. Marland's No. 4 School land, center of the northeast of the northeast of the southeast of 16-25-2w; No. 5 School land, center of the northwest of the northwest of the southeast of 16-25-2w; No. 6 School land, center of the northeast of the northwest of the southeast of 16-25-2w. Independent Oil & Gas Co.'s No. 1 Hangartman, center of the northwest of the northwest of the southwest of 32-21-8.

Pawnee County—Adamson Oil Co.'s No. 5 Sigon, southeast corner of the northwest of the northwest of the southwest of 32-21-8. Deep Rock Oil Co.'s No. 1 Drake, southwest corner of the southeast of the northeast of 13-20-8.

Creek County—Kiyora Oil Co.'s No. 1 Mitchell, northwest corner of the northwest of the southeast of 25-17-9. T. E. Mann Oil Co.'s No. 1 Fife, northwest corner of the southeast of 5-19-8. Mid-Continent Pet. Corp.'s No. 15 Artussee, southwest corner of the northwest of the southeast of 11-17-7. Magnolia Pet. Co.'s No. 3 Emorthla, northwest corner of the northeast of the southwest of 5-16-8. Lorraine Pet. Co.'s No. 3 Scott, northwest corner of the northeast of the southwest of 23-16-8. Roxana Pet. Corp.'s No. 3, Hood, southeast corner of the northwest of 7-14-7. C. G. Tibbens' No. 7 Sewell, northwest corner of the northeast of 13-14-8. Minshall and others' No. 1 Fife, southeast corner of the southwest of 15-19-11. E. R. Minshall's No. 1 Russell, southeast corner of the northwest of the southeast of 27-19-11; No. 1 Sherrill, center of the north line of the northwest of the northwest of 2-18-11. Gypsy Oil Co.'s No. 2 Self, southwest corner of the northwest of the southeast of 25-17-9. Wilcox Oil & Gas Co.'s No. 1, C. A. Scott, northeast corner of the southeast of 20-14-10. Texas Oil Co.'s No. 2 Williams, southwest corner of the southeast of the northwest of 25-17-9. J. H. Wright's No. 5 Dawson, northeast corner of the southeast of the southwest of 24-17-10. Jackson & Wise's No. 1 Layton, northeast corner of the southeast of the northwest of the northeast of 3-17-11. Stover and others' No. 1 Rentie, northeast corner of the southeast of the northeast of the northwest of 3-17-11. Wallace's No. 2 Layton, center of the west line of the southeast of the northeast of the northeast of 3-17-11. Waite Phillips No. 3, Hill, southeast corner of the northwest of the southeast of 6-16-9. Texas Pacific Coal & Oil Co.'s No. 3 Barrett, southwest corner of the northeast of the southeast of 6-16-9. C. G. Tibbens' No. 1 Unallotted, northeast corner of the southwest of the southwest of 30-15-9.

Lincoln County — Gypsy Oil Co.'s No. 1 Caves, southwest corner of the southeast of 33-15-5. Pure Oil Co.'s No. 1, southwest corner of 33-15-5. Independent Oil & Gas Co.'s No. 1 Earp, southeast corner of the northeast of the southeast of 6-15-6, old well deepened. Skelly Oil Co.'s No. 2 Ford, northwest corner of the northeast of the northeast of 7-15-6; No. 3 Ford, southeast corner of the northeast of the northeast of 7-15-6. Phillips Pet. Co.'s No. 1, Kilgore, northwest corner of the southwest of 8-15-6. Mid-Continent Pet. Corp.'s No. 1 Earp, northwest corner of 8-15-6. Twin State Oil Co.'s No. 3 Bigwater, northeast corner of northwest of 2-14-5. Gypsy Oil Co.'s No. 1 Caves, center of the northwest of the northwest of the northwest of the northwest of 11-14-5.

Tulsa County—Hensen's No. 1-A Cox, center of the north line of the southwest of the southwest of 3-19-12. H. C. Wilson's No. 6 Postoak, southwest corner of the southeast of the northwest of 29-19-12. Regal Oil Co.'s No. 26 Bigpond, twin, center of the northwest of the northwest of the southwest of 16-18-12. Pouder & Pomeroy's No. 6 Strip, northwest corner of the northeast of the southeast of the northwest of 16-18-13, now completed; No. 7 Strip, southwest corner of the northeast of the southeast of the northwest of 16-18-13, now completed; No. 8 Strip, northwest corner of the southeast of the southeast of the northwest of 16-18-13; No. 9 Strip, southwest corner of the southeast of the southeast of the northwest of 16-18-13. Hivicks & O'Reilly's No. 4 L. R. Walker, northeast corner of the northwest of the northeast of the southwest of 16-18-13, now completed; No. 5 L. R. Walker, northwest corner of the northeast of the northeast of the southwest of 16-18-13. Dillard's No. 1 Owens, northeast corner of the southeast of the northwest of 2-17-14 . Riverland Oil Co.'s No. 3 Bowlin, northwest corner of the northwest of 14-16-12.

Okmulgee County—Cosden Oil & Gas Co.'s No. 2 Moore, southeast corner of the northeast of the southwest of 14-15-12; No. 3 Moore, northwest corner of the northeast of the southwest of 14-15-12. Independent Oil & Gas Co.'s No. 1 Askron, northwest corner of the southwest of the southeast of 14-15-12. Waite Phillips' No. 6 Murrell, center of the northwest of the northeast of 23-13-11. J. A. Swindler's No. 2 Lewis, center of the south line of the southwest of the northeast of 25-13-11; No. 3 Lewis, center of the west line of the southwest of the northeast of 25-13-11. Continental Oil Co. and others' No. 2 Grayson, twin, center of the northwest of the northwest of the northeast of 20-12-12; No. 3 Grayson, center of the northeast of the northeast of the northwest of 20-12-12. Simms Oil Co.'s No. 4-A Rentie, twin, southwest corner of the northwest of the northwest of 31-12-11. Schoenfelt et al's No. 3 Hawkins, northeast corner of the southwest of 4-11-12. Weir et al's No. 1 Hawkins, northwest corner of the southeast of 4-11-12. W. B. Pine's No. 1 L. Griffin, northwest corner of the northeast of the southwest of 28-12-14, old well deepened. Alsen's No. 1 L. Anderson, southwest corner of the southeast of the southeast of the southeast of 30-12-14, old well deepened. Papoose Oil Co.'s No. 23 I. Osborn, southwest corner of the southeast of 21-15-14.

Okfuskee County—Henry Oil Co. & Amerada No. 6 Barnett, southeast corner of the northwest of the southwest of 24-11-11.

Osage County—Gillespie's No. 4, northeast of the northwest of the northeast of the northeast of 8-20-12, old well deepened. J. C. Stine's No. 6, center of the northeast of the southwest of the southeast of 9-21-12. Oswego Pet. Co.'s No. 2, northeast of the northwest of the north-

east of the northeast of 21-21-12. Tidal Osage Oil Co.'s No. 20, southwest of the southeast of the southwest of the southwest of 27-22-10. Peters Pet. Co.'s No. 10, center of the northwest of the southeast of the northeast of 33-24-10. Mid-Kansas Oil & Gas Co.'s No. 1, southwest corner of 7-24-8. Gypsy Oil Co.'s No. 1, northwest of the southeast of 11-25-7. Indian Territory Illuminating Oil Co.'s No. 331, center of the southwest of the southeast of the northeast of 34-25-11. Devonian Oil Co.'s No. 10, center of the south line of the north half of the south half of the southwest of 34-25-11. Indian Territory Illuminating No. 1, southeast of the northeast of 3-28-11. Phillips Pet. Co.'s No. 3, northeast of the northwest of the northeast of the northwest of 17-29-6. Indian Territory Illuminating Co.'s No. 1, southwest of the northwest of 14-29-10; No. 333, center of the northwest of the southeast of the southeast of 29-29-10. Wiser Oil Co.'s No. 10, northwest of the northeast of the northwest of 27-29-11.

Jefferson County — Gypsy Oil Co.'s No. 7 Seay, center of the south line of the southeast of the northeast of 33-6s-5w; Humble-Hambro No. 2 Indian, center of the south line of the southwest of the northwest of 34-6s-5w; Couch and others No. 1 Seay, northeast corner of the northwest of the southwest of 4-7s-5e, old well deepened.

Carter County — Magnolia Pet. Co.'s No. 5 E. Lohman, northeast of the southeast of 23-2s-3w. Sturm & Slick No. 1 Chase, northeast of the southeast of the northeast of 31-2s-1w. Humble Oil & Ref. Co.'s No. 1 Black, northwest of the northeast of the southwest of 22-4s-1w.

Garvin County—L. D. Jones No. 1 Christine, northeast corner of the southwest of 5-1n-1e.

Seminole County — Sinclair-Houston's No. 6 M. Hill, center of the southeast of the southwest of the southeast of 28-11-8; No. 5 M. Hill, center of the northeast of the northwest of the northeast of 33-11-8. Plover Drilling Co.'s No. 1-W Jefferson, center of the southeast of the southeast of the southeast of 7-9-8. Berry Pet. Co.'s No. 1 Jas. Hill, center of the southwest of the northwest of the northwest of 8-9-8. Homaokla Oil Co.'s No. 1 Brown, northeast corner of the southwest of the southwest of 20-8-8. Dixie Oil Co.'s No. 4 Knight, center of the southwest of the northwest of the northeast of 6-7-8. P. & R. Corp.'s No. 1 T. Hawkins, center of the northeast of the southeast of the northwest of 6-7-8. Magnolia Pet. Co.'s No. 1 Harber, center of the northwest of the southeast of 6-7-8.

Hughes County — Indian Territory Illuminating Oil Co.'s No. 3 M. Anderson, center of the southeast of the northwest of the southwest of 1-9-9; No. 6 Anderson, center of the southwest of the northeast of the southwest of 1-9-9; No. 7 M. Anderson, center of the southeast of the northeast of the southwest of 1-9-9. Josey Oil Co.'s No. 4, C. Arbor, center of the southwest of the southeast of the northwest of 1-9-9; No. 5 Arbor, center of the southeast of the southeast of the northwest of 1-9-9.

Caddo County—Briscoe & Hall's No. 4-A Culp, northwest corner of the northeast of the northeast of 6-5-9w.

Tillman County—Otter Creek Oil Co.'s No. 1 Smith, center of the southeast of the northwest of the southeast of 13-1-18w.

Grady County—Carter Oil Co.'s No. 1 C. M. Scott, center of the southeast of the northeast of 34-5-8w. Bob Sultan's No. 3 Clay, southwest corner of the northwest of the southwest of the southeast of 15-5-7w.

Stephens County—Ka Wye Oil Co.'s No. 3 Coffelt, northeast corner of the northwest of the northeast of the southeast of 26-1-9w. Eagle Creek Oil Co.'s No. 1 Brown, northeast corner of the southeast of the northeast of 26-1-9w, old well deepened. Wm. Priddy No. 3 Coffelt, Northwest corner of the northeast of the northeast of the southeast of 26-1-9w. Fisher & Brannon's No. 5 Worrell, northeast corner of the southeast of the northwest of 22-1s-8w. Winkler's No. 4 Bristow, center of the northwest of the southeast of the southwest of 18-2s-7w.

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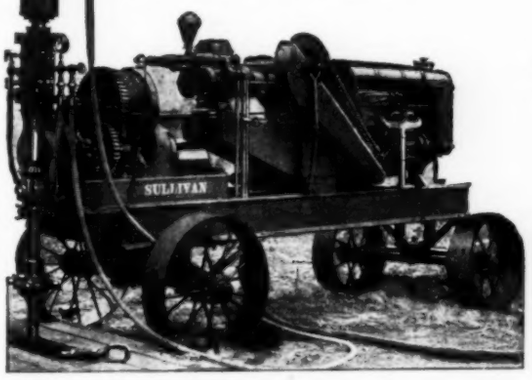

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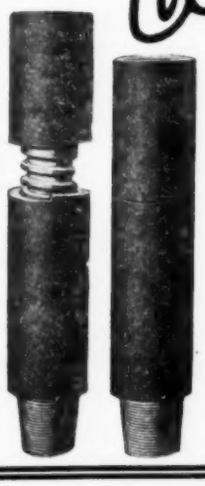

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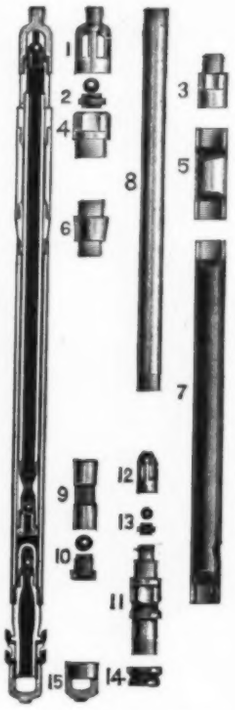

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Oil and Gas Possibilities In the Trinity

(Continued from page 28)

rocks consisting of diamond-bearing peridotite near Murfreesboro.

Prior to the subsidence that produced the sea in which the Trinity was laid down, the older rocks were folded, warped, faulted and eroded. This gives a variable seat for the Trinity to rest upon and results in its being found resting on the Paleozoic rocks in places and upon other rocks in other places. In Alabama and Georgia it rests upon the Cambrian, Ordovician, Keweenawan and Post-Cambrian intrusives. This emphasizes the vast extent of the unconformity. In other words it would be but a guess as to what rocks would be found beneath the Trinity in any unexplored region such as, say, Pine Island. It is my guess that they will prove to be Pennsylvanian anywhere in the Shreveport region.

At the contact between the Trinity and the Paleozoic near DeQueen, the Paleozoic floor upon which the Trinity rests, where the Cretaceous cover is partly removed by erosion, shows an average slope towards the Gulf of Mexico of about 80 feet to the mile.[3] Erosion has apparently smoothed this Paleozoic floor so that it is fairly uniform in the area exposed, yet it is to be expected that a smooth condition like this would not obtain over any extended area, but instead, there would be numerous hills and valleys giving a pronounced irregularity to the Trinity-Paleozoic contact floor.

This "floor" has no reference to the attitude, or inclination of the Paleozoic beds: these beds were subjected to intense folding and now stand at high angles. This "floor" refers to the truncated surface of the steeply inclined Paleozoic beds.

Neither does the inclination of this Paleozoic "floor" refer to the angle at which the Trinity beds are found, nor could this be determined by a comparison of depths to which wells have reached this floor—this floor, over any wide area, would presumably be greatly warped and irregular.

The Trinity beds and the overlying formations are nearly level, but they have a gentle dip to the south over Southern Arkansas and Northern Louisiana which is subject to variations due to the folds and faults such as the Sabine Uplift and other structures.

There was also a pronounced time hiatus at the close of the Upper Cretaceous time, giving another great unconformity between the Upper and the Lower Cretaceous. During this time interval any portion, or all, of the Lower Cretaceous could have eroded away. For this reason it is doubtful that much of the Washita and Fredericksburg remain beneath the Woodbine in this region. In the area covered by the Caddo Gap and DeQueen

[3] U. S. G. S. Bulletin 691, No. 275.

quadrangles the Bingen formation (Woodbine) rests directly on the Trinity[4]; some places show about 250 feet of the Washita group and 15 to 25 feet of Goodland limestone[5] (Fredericksburg) between the Woodbine and the Trinity. In general this may mean that the Trinity lies close to, or immediately beneath the Woodbine throughout much of this area.

Again, this Lower Cretaceous floor, folded and eroded as it was during the time interval between the end of its deposition and the beginning of the Bingen (Woodbine) deposition, will be irregular and cause the Woodbine formation to be thick in places, thin in others, and wholly missing in still others where a Lower Cretaceous hill failed to be completely covered by Bingen.

It should be remembered that there would be overlaps in unconformity zones so that the outcrop exposures will fail to give a true section of the different beds.

Character of Beds of Trinity Formation

The accompanying generalized section graphically represents the character and makeup of the beds constituting the Trinity formation in the DeQueen-Caddo Gap area. It should be noted that this section departs from the three-fold divisions (Paluxy, Glen Rose and Travis Peak) employed in North Central Texas, and that it is not susceptible to such division in this area.

"It consists of clay, sand, gravel, limestone, gypsum, and celestite, named in the descending order of abundance".[6] The DeQueen limestone member, the Ultima Thule gravel lentil, the Dierks limestone lentil, and the Pike gravel member receive their names from Arkansas towns where they are conspicuously exposed.

Farther west, in Southern Oklahoma and North Central Texas, the Trinity has been described by Stephenson[7] and by Taff.[8] In the Tishomingo quadrangle the Trinity consists of "fine, compact, incoherent sand and scattered lentils of sandy clay, with a basal conglomerate a few feet to 50 feet thick, which in the western half of the quadrangle is cemented with chalky white lime. Pebbly lenses occur in the sand in places." At Red Bluff, Red river, about eight miles northwest of Denison, "the upper 150 feet is well exposed; light-gray, mostly fine argillaceous irregularly bedded compact sand, with subordinate lenses of fine sandy clay and some pebbly lenses: in the lower 30 feet are interbedded lenses of purplish clay having a maximum observed thickness of six feet."

East of DeQueen, and two miles north of Center Point,[9] "where the for-

[4]U. S. G. S. Bulletin 690-B, p. 19.
[5]U. S. G. S. Bulletin 691, p. 274.
[6]N. S. G. S. Bulletin 690-B, p. 18.
[7]U. S. G. S. Prof. Pa., 120, p. 134.
[8]U. S. G. S. Tishomingo Quadrangle Folio.
[9]U. S. G. S. Bulletin 540-U, p. 4, Perodite in Arkansas.

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4000 to 4400 ft.	4120-ft. 6-in.	2941-ft. 7-in.	71
4500 to 4900 ft.	3128-ft. 2-in.	1968-ft. 9-in.	63
5500 to 5900 ft.	129-ft.	78-ft. 6-in.	61

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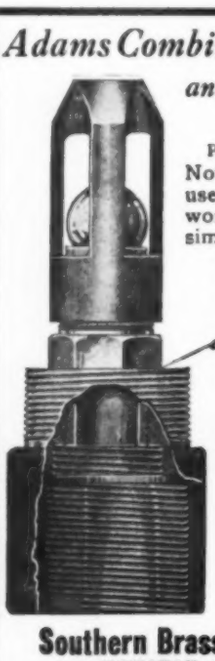

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mation is more than 600 feet thick, it thins towards the east and in the vicinity of Murfreesboro is much thinner. It consists of intercalated beds of marly clay, sand, gravel and limestone. The principal bed of gravel is at the base. The limestone is in two beds, one near the top of the formation and the other near its base, from which it is separated by a pronounced unconformity, as is shown by the planing off of the beds of the Trinity towards the east."

This planing off to the east means that the Bingen series overlap and there would not be any outcrop evidence to show the thickness and character of the Trinity beds in such areas as, say, Smackover.

The exposed Trinitv formation is only about 70 feet thick in eastern Pike County, north of Delight,[10] where "it consists predominantly of clay but includes beds of sand, gravel, and limestone. The limestone contains fossil oysters and other shells and occurs in two beds, the Dierks limestone lentil and the DeQueen limestone member, both of which are exposed in narrow belts. The gravel occurs in a bed as much as 100 feet thick at the base of the formation.

"Although the Trinity occupies a nearly horizontal position, it rests upon the truncated upturned edges of steeply dipping shales and sandstones of Carboniferous age. A pronounced unconformity therefore occurs at the base of the Trinity."

The Pike gravel at the base of the Trinity is derived from the Arkansas novaculite of the Ouachita Mountain range north of this area and consists of pebbles usually less than half an inch in diameter, partly to thoroughly rounded. In the main this consists of dense white, gray, brown, black and red novaculite, but also minor quantities of quartz, quartzite and standstone. Most of the gravel is loose, cross-bedded and lensed with clay, in places being cemented by iron oxide into hard conglomerate.

Oil and Gas Possibilities in the Trinity

The loose sand in the basal part of the Dierks limestone lentil has been impregnated with asphalt at various places in Pike and Sevier Counties, Arkansas, one of which localities has shipped commercial quantities.[11] Likewise the Trinity formation contains petroleum and asphalt at many places in southern Oklahoma and northern Texas. The asphalt of these three states, "is doubtless a residue of crude petroleum, whose lighter and more volatile parts have escaped by evaporation." Since asphalt deposits are known in the Carboniferous rocks north of the Trinity outcrop, it is probable that most of it has been derived from the highly-tilted underlying beds which have their edges projecting against the base of the Trinity. "Any oil in the

[10] U. S. G. S. Bulletin 735-I, p. 240, Peridotite in Pike County, Arkansas.
[11] U. S. G. S. Bulletin 691, p. 271, Asphalt Deposits and Oil Conditions in Southwestern Arkansas.

Carboniferous beds would, in the course of time, work its way upward into the Trinity." It would not go higher than the lower limestone of the Trinity, because of the impervious character of this limestone and the associated clays. As the Trinity has a gentle dip to the south, the oil would be conveyed up the dip to the surface. This is, however, no direct proof that some or all of the petroleum did not originate in the basal part of the Trinity formation, which contains some fossiliferous limestone.

"On the assumption that the petroleum yielding the asphalt herein described originated either in the Trinity or in the underlying rocks, the petroleum has probably migrated northward." In areas farther south, such as Pine Island, any oil originating in the Trinity or coming into it from the underlying Carboniferous beds would not be subjected to evaporation processes but would remain available for the drill. It is to be expected that the lighter constituents might work up to higher levels in the Trinity formation thus giving a rich gas pay near the top of the Trinity and light oil deeper in the formation.

Pine Island has found unusually rich gas in large quantities in what is presumably the upper portion of the Trinity formation, at drilling depth of 3623 feet. Pays of light oil are likely to be present at points throughout the next 1000, and more, feet. Wells near Ashdown, Little River County, Arkansas, about 25 miles south of the Trinity outcrop, show much more than 2000 feet of thickness for the Trinity formation and plenty of sand bodies and capping materials, lacking only closed structure to make an oil field.

It is clear that there is a great body of Trinity whose members are of such a character as to make favorable conditions for oil fields. Depth would, in most likelihood, assure this production to be rich gas or very light oil. The gas in Pine Island tested 725 gallons of gasoline per million cubic feet, and the oil gauged 47½ to 48 degrees, Baume.

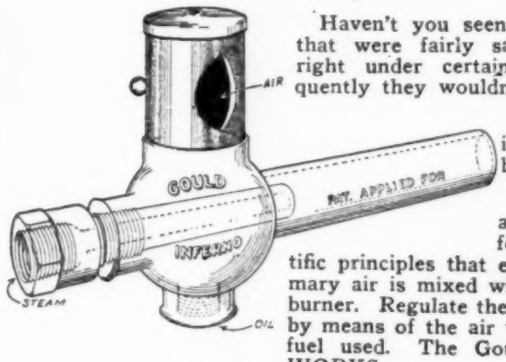
Drilling Conditions

The type log for any one locality need not be expected to apply to other fields, nor can the type for any field be expected to conform to the character of Trinity deposits exposed at the nearest outcrop. A slowly subsiding sea encroaching upon the land would have an ever-advancing shoreline where depostis of new sands, clays, etc., would be composed of whatever rock material chanced to be broken down by erosion and washed into these advancing seas. The deeper areas would receive the finer materials that could be carried farther into the advancing sea and limestones would be formed in the deeper waters.

A great deal of anhydrite is found beneath the Woodbine in Pine Island; this is probably of a secondary nature, or it could have been deposited in the same manner as beds of salt. Anhydrite is of an azure color and most too hard for the rotary: it is intermingled with hard black shale and has produced a great deal of oil of from 44 to 46 degrees Be., this oil being found in crevices and being a hit-and-miss proposition at depths between 2800 and 3000 feet. Deeper drilling found big gas at 3623 feet which is believed to be from a true sand body. Soft, heaving shales are encountered between the gas pay and the anhydrite zone so it becomes necessary to drill these wells with the rotary to the point where casing is set—at 3500 feet—then complete with cable tools.

A similar section need not obtain over the entire Caddo field, nor need the Trinity formation be found at the same depths, yet prospecting for Trinity pay should be carried on in all of the producing fields of the Shreveport region to depths that reach the Paleozoic rocks or that prove the Trinity too deep for commercial development. The unknown and variable thickness of the Washita and Fredericksburg will make vast differences in drilling depths to the Trinity in different fields yet his need have no bearing on the possibility of finding pay in the Trinity. A productive structure in the Upper Cretaceous is most likely to overlie a still better fold in the Lower Cretaceous where light oil can be had from the Trinity formation.

Why Gould "Inferno" Oil Burners Always "Work"



Haven't you seen and used oil burners that were fairly satisfactory—usually all right under certain conditions—but frequently they wouldn't "work"?

And you formed an impression that all oil burners are alike.

But they're not all alike. The Gould "Inferno" embodies scientific principles that eliminate chance. Primary air is mixed with the fuel inside the burner. Regulate the supply of primary air by means of the air vent, according to the fuel used. The Gould "Inferno" always WORKS.

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Eight 40 H. P. New Brownell Boilers, Will price cheap upon application,

100,000	ft.	2"	Used	line	pipe.
20,000	"	3"	"	"	"
20,000	"	4"	"	"	"
20,000	"	6"	"	"	"
15,000	"	8"	"	"	"

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BRANCH STORES:
Wichita Falls, Holliday, Vernon, Breckenridge, Texas

Oil Production Cost Accounting Methods

(Continued from page 32.)

would not be applicable to one engaged in municipal work.

The Finished Plant Investment Subledger for this department is divided into districts and the cost of the equipment in each district carried separately.

Plant Investment Gas Department—
Fee lands.
Rights of ways.
Delivery facilities.
Telephone and telegraph lines.
Office equipment.
Buildings.
Gas pipe lines:
  Main lines.
  Gathering lines.
Meter and regulator stations.
Distributing systems (high pressure):
  Pipe lines.
  Meters and regulator stations.
Other property.

Plant Investment Accounts—All Other Departments

No classification will be given for any of the rest of the departments since the foregoing are the only ones which we will discuss under the main subject of this article.

To properly segregate the plant investment account and to arrive at the costs of such investment for analysis purposes, it is necessary to have a construction cost system. The following is being used by the operator under discussion and is giving him all the information he desires.

Cost System of Plant Investment Construction

Before starting on this subject it is well to state that unless the fullest cooperation of the field men can be secured the best cost system ever devised will fail miserably. It is therefore important that the accountant explain to the field men just what he is trying to accomplish and show them how the cost system will help them in their operating.

Before starting any construction work or development the forman or superintendent in charge of the work requests the town office for authority for such work. Form Figure No. 3 is filled in showing where the job is located, a description of the job, date the work will

Figure 3. Request for authority for construction work.

be started, and the probable date of completion. This form also either has sketched on the back or is accompanied by a plat showing the location of the job, tying it in to a well or property lines. This sketch is used by the engineer in plotting the additional development on the lease map, which is kept for insurance purposes and to keep the operator in the town office familiar with the condition and development on each of his leases.

As stated the authorization request should be forwarded before the work has been started, but in some cases this is impossible. The field man usually takes the attitude that "get production" is the thing and will not hold up any work for what he classes as accounting "red tape". This is not ideal but will not in any way hinder the accountant if he will secure the authorization request regardless of whether the work has not been started, has been started or is completed. The main thing is to secure the authorization as soon as possible.

Where the work is on a lease and is chargeable to the accounts under oil and gas producing equipment, a number is given the request by the field man, using the lease number with another number suffixed, indicating the job. To illustrate: authorization No. 243-12 would be the twelfth job started on lease No. 243. Where the work is not chargeable to these accounts but to the general properties accounts the request is not numbered by the field.

When a request is received in the town office it is turned over to the person in charge of the production work, who issues the proper authorization for the work, using form Figure No. 4, sending the original to the field man, and copies to the accountant and engineer.

The authorization is usually discussed with the engineer before being issued, he giving the sub-division into which he desires the cost to be kept. In laying a line for instance, the sub-classification would probably be somewhat as follows, varying of course with the individual idea of the engineer, and the information he wishes.

Authorization No. 124

Four-inch oil pipe line Murphy stock

The FT. WORTH LABORATORIES

Field Gas Testing. Analysis of oil field brines, gas minerals and oil Sell Thermometers, Hydrometers and Laboratory Glassware

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Viking Twin Oil Pumping Units

Figure—15

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Capacity each pump 90 Gallons per minute.

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18,000 acres. University permits, dated October 1 1924, for five years, joining University permits of Sun Oil Co., Gulf Production Co., Standard of California. Gulf, Transcontinental, Arkansas Fuel now drilling and more wells to start. Prices right. Pecos County.

20,000 acres, 10-year leases, Crockett County; large and small blocks adjoining best companies.

5,000 acres, 10-year leases; close to drilling wells; Upton County.

133,000 acres Pecos County, near blocks of Arkansas Fuel, Phillips Co., and Pittsburgh operators. Low in price. Will sell in blocks or arrange for wells. Will allow time for geological inspection.

3,000 acres, 10-year lease. Upton County; near drilling well and adjoining leading company holdings.

2,010 acres, Irion County; 10-year lease. Close to blocks big companies. Near drilling wells.

15,000 acres, Loving County; 10-year lease. 10c rental. On line with Artesia, New Mexico, production. Will allow time for geological inspection.

Prices and maps on request.

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Stocked by OIL WELL SUPPLY CO.

tanks to main gathering system, approximately 10 miles.

Cost to to be sub-divided as follow:

Ditching.
Stringing.
Backfill.
Engineering.
Pipe.
Fittings.
Labor.
Miscellaneous costs.

The authorizations for general properties are numbered consecutively, starting with number one in each division or dis-

Figure 4. Authorization form, made in quadruplicate; one copy to engineer, one to accountant and original to field. One copy to file.

trict prefixing a letter indicating the department with which the facility will be associated. If the facility were to serve the pipe line department it would have the letter "P" prefixed to the number of the authorization, the production department "O", refinery, "R", gas "G", etc.

The accountant, upon receipt of a copy of the authorization, opens an account with such authorization, in the unfinished plant investment ledger of the proper department. This form is ruled as shown in figure No. 5 a separate page being used for each job. The columns of this form should be headed with the subclassifications of the authorization and all items charged shown in detail and the cost extended into the proper column.

The field man in making his reports of material used, payroll, teaming, etc., must show on such reports the authorizations to which such items are chargeable.

When an authorization is completed a physical inventory is made of the work. Form Figure No. 6 is completed, showing the inventory, date completed, material salvaged and its condition, etc. This report is forwarded to the accountant for auditing and checking the charges to the job before its cost is considered closed on the books. The date of completion of the work is very important, as this governs the closing of the authorization

by the accountant. When all the reports up to and including the date of completion have been posted, he knows that the charges have all been entered.

As soon as satisfied that the cost is correct and all adjustments have been made, the accountant transfers the cost from the Unfinished Plant Investment Ledger to the Finished Plant Investment Ledger under its proper classification, showing the authorization number in the entry. Whenever it is necessary to check back the detail of any one of these classifications, reference is made to the Unfinished Plant Investment Ledger.

When desired the accountant may have a copy made of the charges to the job, and sent to the field man or engineer, for their information.

Any additions to work already completed, which can be considered an investment, should be covered by a new work order or authorization, accounting for its cost in this same manner.

This plan of issuing authorizations for work under construction can be carried too far, and the reader is warned to be very careful when handling his cost work in this manner. Too many small jobs given numbers and their cost carried in the unfinished plant investment ledger, soon make it so bulky as to be impossible to handle. It is the best policy to issue work orders only for major items of construction work. Where possible, as in the case of lease lines, temporary buildings and items placed on a lease which will only remain for a short time, no authorization should be issued but the cost should be charged direct to the proper finished plant investment ledger account in detail.

Where the operator is budgeting his expenditures a memorandum account may be opened in the sub-ledger, and the estimated cost of each authorization charged to it. Then at any time, by charging to this account the total charges to authorizations, the balance will be the value of the authorized uncompleted construction and with this known his future program may be outlined. The only argument against such a plan as this is the estimating. Estimating is a treacherous subject at its best, and more so in the oil business. Of course if a man can be secured who is familiar with all phases of the work to make these estimates this is not such a hazardous plan. Also when an operator has had a system of cost accounting operating for some time, his accumulated data will greatly assist him in making these estimates.

In handling the cost of drilling wells a great many things of an unusual character are encountered and it will be well at this time to mention some of these and discuss them. The first is the handling of the completed well cost, whether to charge it to expense or capitalize it.

The writer has heard considerable argument both ways and does not think it consistent from his standpoint to advance any argument either for or against

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Valve closes instantly in case of accident by an unusual or sudden flow of steam in either direction.
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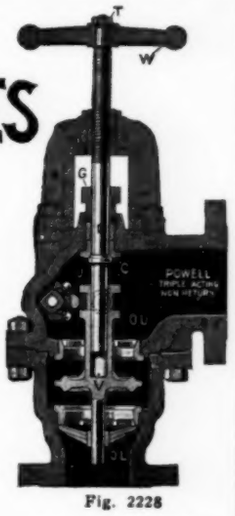

Fig. 2228

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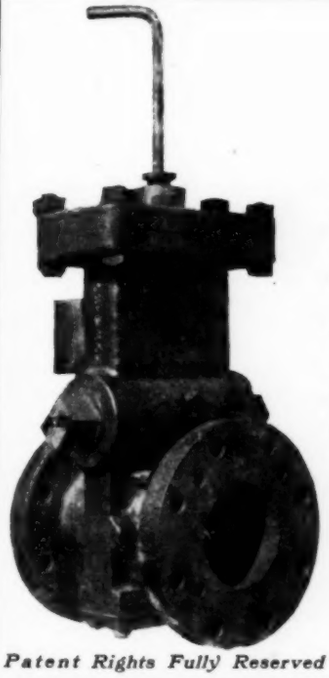

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Breckenridge	Gorman	Bartlesville	Drumright	Tonkawa	Eureka
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THE EASTERN TORPEDO OF OHIO CO.

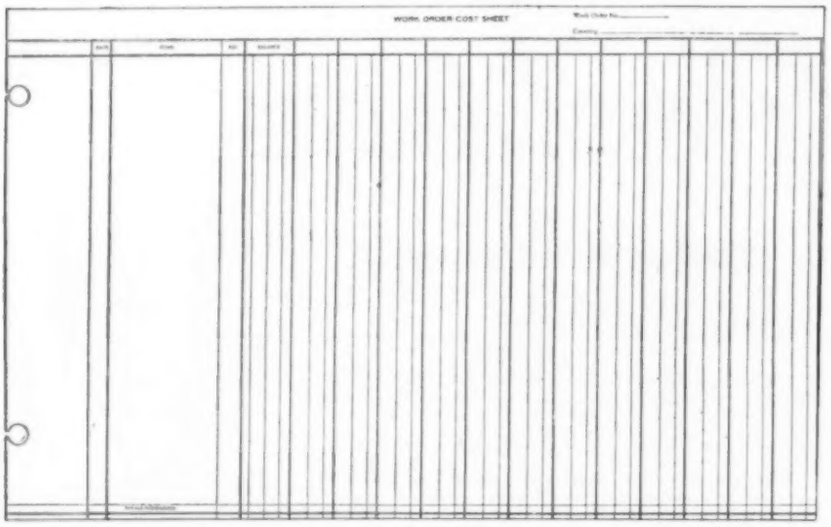


Figure 5. Unfinished Plant Investment Sub-Ledger sheet. On this form is carried the cost of the authorized work under construction.

either plan. The operator whose system is under discussion capitalizes all of his drilling costs—in fact, capitalizes all costs wherever possible or consistent.

Another important item encountered in the cost of a well is that of charging an equitable portion of the drilling rig maintenance to the well.

A good plan is to charge to the well cost, the cost of all repairs and replacements to the rig while it is drilling the well. The way to accomplish this is to have an inventory made of the rig before it is moved on the well location, and then charge to the well cost all items regardless of whether well cost or rig maintenance. When the well is completed have a physical inventory made of the rig as it is moved off the well. With these inventories and the inventory of the completed well (figure 6) it is a very easy matter to adjust the rig account, debiting and crediting the well cost with the differences.

This method of course is incorrect for the reason that any broken parts repaired or replaced would have their entire cost charged to the one well, when as a matter of fact these parts were more or less weakened on the previous wells drilled.

Any big replacement charge should be spread over several wells if in the opinion of the accountant it is not properly chargeable to the one well. In fact, the system must be flexible so any such items can be taken up under their own merits.

Some operators open an earnings account and charge the wells with a per diem rate for the use of the rig, charging against this account the cost of all repairs, replacements and maintenance of rigs. The balance in this account is then charged to profit or loss at the end of the accounting period. This method is also incorrect as a rig does not suffer the same wear and tear each day, and certainly not the same on each well.

Another problem encountered is that of accounting for the lease, and construction tools. The reader will find that it is impossible to keep an accurate check on what happens to the various tools. They will be stolen, misplaced, broken, etc., and no report of their loss or breakage made to the accountant.

To keep track of the tools it is best to issue an authorization for the cost of all tools in each district, and open an account in the unfinished plant investment ledger. Then charge to this account the cost of all tools purchased regardless of whether new tools or merely replacements. Have an inventory made of all tools in the district every three months, and adjust this authorization on that basis, crediting it with the inventory and charging to the proper accounts. The balance will then be the replacements and it should be prorated (so much each month charged to each construction job or operating expense) over the next three months period.

Some operators do not charge the cost of tools to investment, but upon purchase charge direct to expense, thereby eliminating all accounting for them.

Either plan is good, but the writer prefers the first one outlined.

The accountant should have an inventory made of the equipment on the leases at certain intervals, for equipment will be moved in the district from one lease to another, usually in a rush and no transfer will be made. He should attempt to keep his book inventory as nearly as possible in line with the physical inventory, making adjustments whenever they are necessary. Under the discussion of the material and supplies account we will outline a method used by this operator for keeping track of the location and condition of the various items of his equipment.

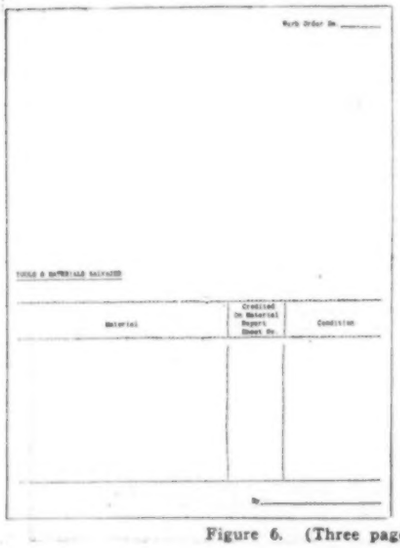
In the following articles we will take up the balance of the accounts in the same manner as these first few have been discussed.

Third Deep Test Is Spudded In on R. S. Shanklin Farm

Luling, Texas.—A rig has been set up on the R. S. Shanklin farm by the United North and South Oil Company, and drilling is in progress, making the third deep test that has been spudded in near here by this company. Considerable land in this vicinity has been leased by the company.

Active drilling has been started on the Inscore lease to make a test of the showings of oil found at 640, 1500 and 2100 feet in that section. A standard rig is being used in the test.

As a result of the efficiency of the standardized method of pumping in this section the Grayburg Oil Company has started standardizing its wells, using at this time this method on forty of its wells.



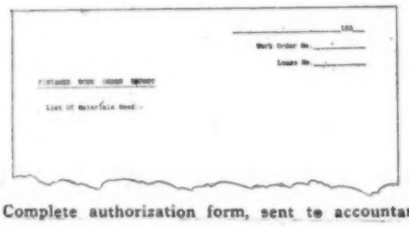
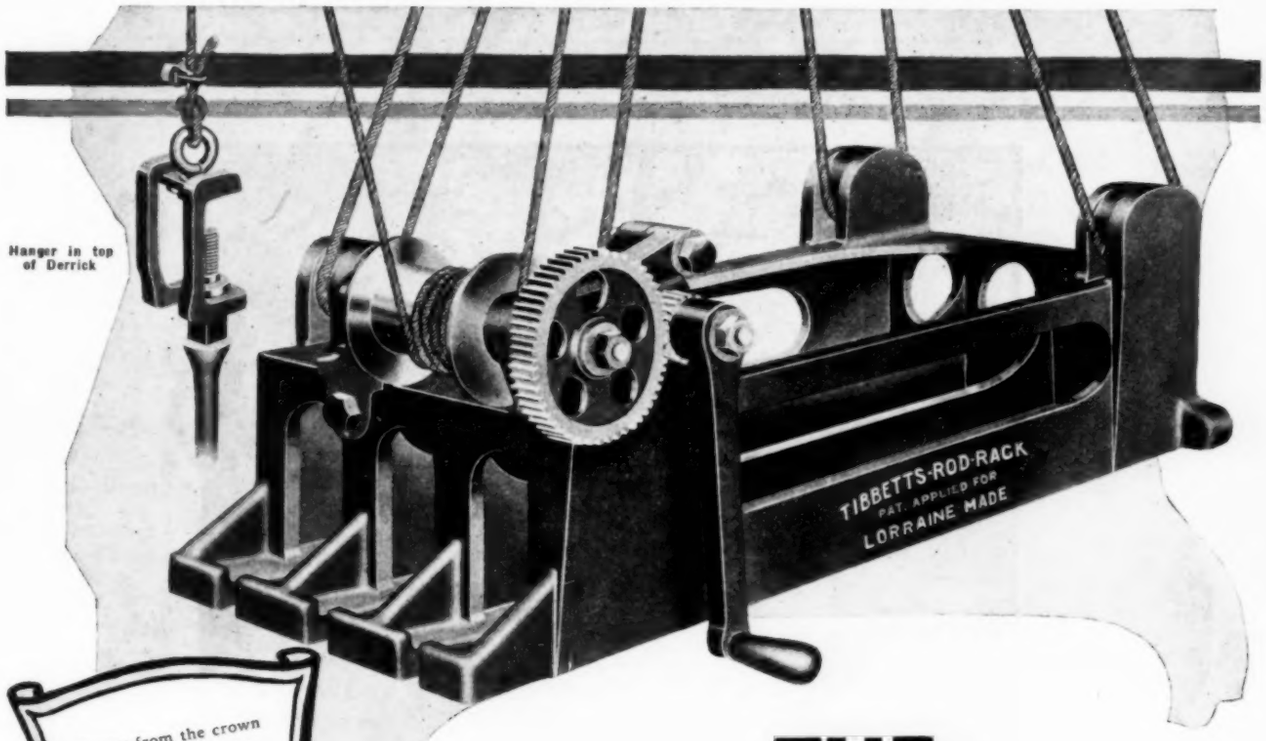
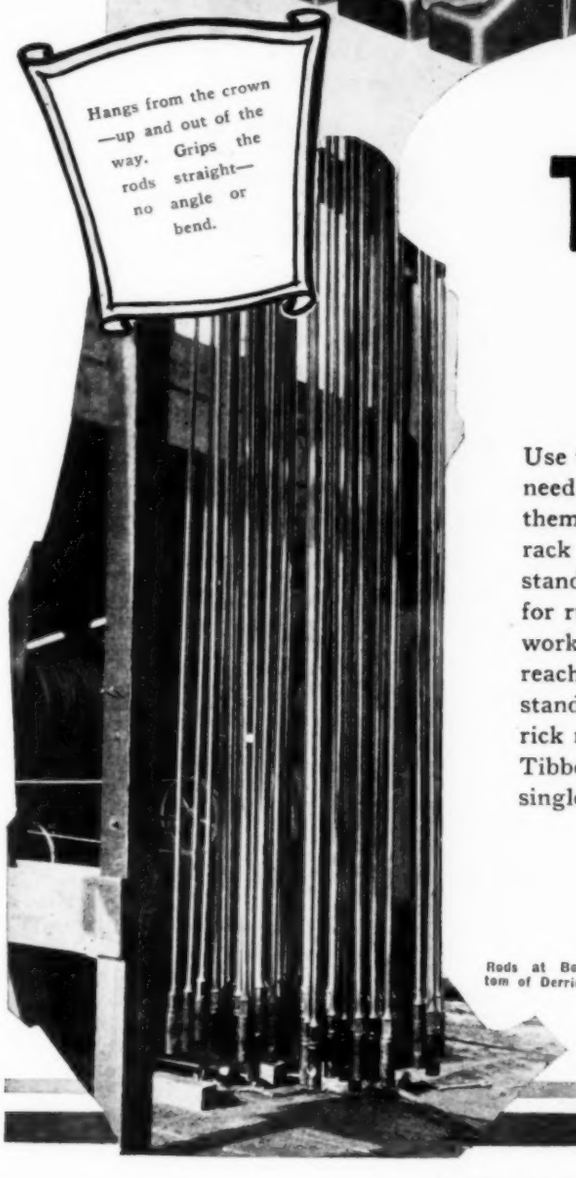


Figure 6. (Three pages) Complete authorization form, sent to accountant on completion of work





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Use the Tibbetts (Lorraine Built) Rod Rack and you won't need to insure your sucker rods. There's no chance for them to get bent or broken or damaged in any way. The rack holds them off the floor from the crown, sixty or more stands, in compact formation, out of the way, always ready for running in. . . . . It enables a hundred percent faster work, as the sucker rod elevator is released immediately on reaching the top, and can be started down for another stand. The special hanger holds the string until the derrick man places it in the rack . . . . . The investment in a Tibbetts Rack will be returned to you several times on a single job pulling and running in.

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Buck & Stoddard, Room 1918, 30 Church St., New York City

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Portable Rotary Rig Company of Houston, Texas have adopted Waukesha Oil Field Power Units as exclusive equipment on all of their products. This is one of many expressions of confidence in the long service life and unusual adaptability to oil field work of the famous Waukesha "Ricardo Head" Units.

For oil producers and contractors, we have an Oil Field Bulletin which gives many examples of Waukesha time- and - money - saving applications. A copy will be sent you on request.

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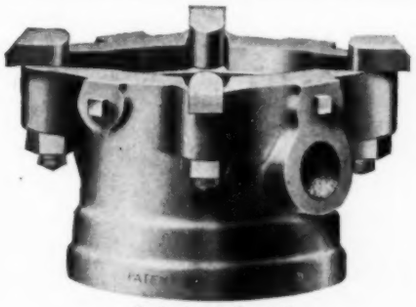


Casinghead Control

Hold-Down Casing Head Insures Tight Seal

Houston Pump and Supply Company, Carr and Leona Streets, Houston, Texas, has announced a new Hold-Down Casing Head, designed for use with the French Gas-Tite Tubing Anchor, also manufactured by that company.

This casing head is made entirely of steel castings and steel forgings.

Use of the casing head in conjunction with the anchor insures an absolute tight seal at the top of the well. Tops for the casing head are made of steel forgings and are grooved to fit square packing, either flax of hydraulic.

In addition to set screws, such as are found in the ordinary type of casing head, this one has four or six heavy forged steel bolts with extension heads which can be adjusted to fit the usual attachments.

When releasing the part being held it is only necessary to loosen the nuts on the bolts one or two turns. The bolt heads can then be turned one-half turn leaving the top of the head clear.

This casing head is made regularly in all sizes and fits all threads up to and including 10 inch casing.

Additional information will be supplied upon request to the company.

Load Indicator Gives Important Data on Pumping

Axelson Machine Company, Box 337, Los Angeles, California, is marketing a hydraulic Load Indicator for scientifically procuring and imparting to the oil producer interesting and valuable data such as fluid column weights, sucker rod loads, and cyclic loads during pumping. This load indicator is said to be the result of several years of research and testing and has been found to be of utmost accuracy, tested under every kind of service in the field.

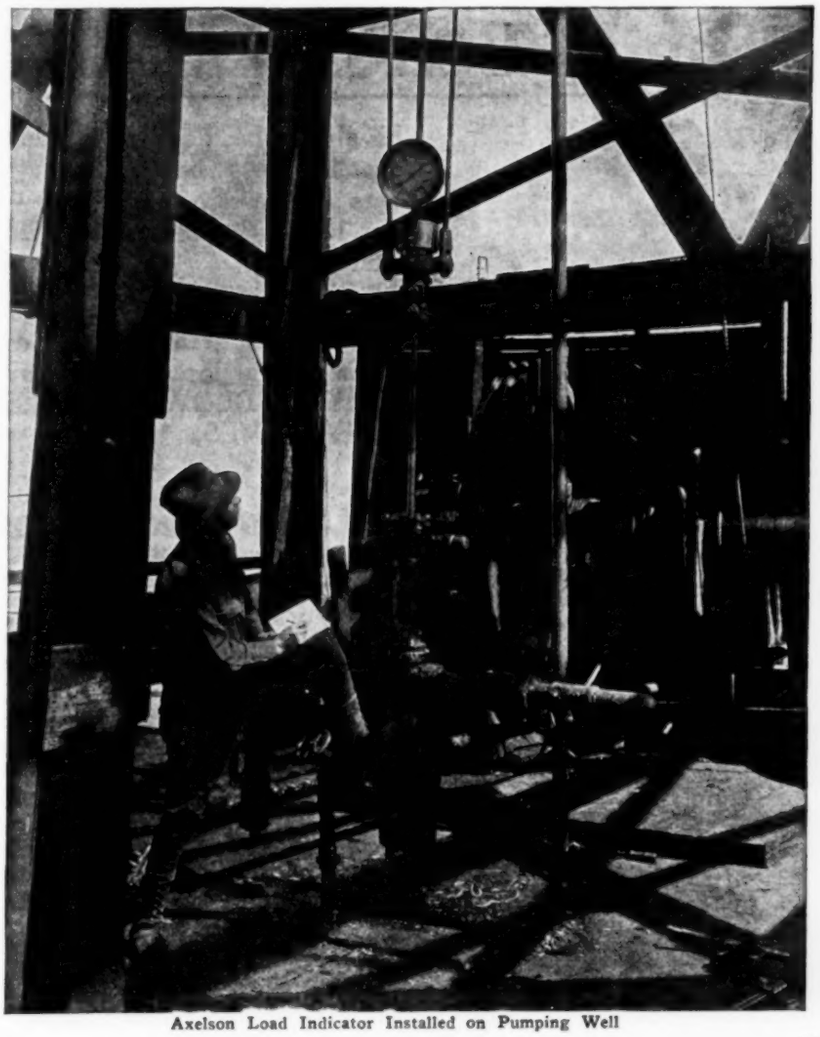
In construction, the Axelson Load Indicator consists of a hollow cylinder enveloping a hollow plunger. To the inner threaded extension of the cylinder is attached the polished rod grip. This completes one side of the compression unit. To trunion extensions of the plunger are attached to the bronze-bushed wire cable eyes. This cable is thrown over the walking beam so that pumping can be resumed upon release of the polished rod clamp. Attached to the top of the cylinder is a special heavy duty gauge which indicates the loads for the complete cycle of operation during pumping and the dead weight load when pumping has ceased.

Two essential features, it is stated, have made this simple type of load measuring device possible and practical: First—its exact accuracy of fit, both as to size and finish. The loss by friction has thus been made practically negligible. The fit of the cylinder and plunger is micrometrically accurate to one ten thousandth of an inch, which results in no trace of fluid loss during compression. Second—the accuracy of calibration is determined by actual load application from a balanced beam type of tensile testing machine used in the research laboratory and as shown in the above illustration. Loads are applied from minimum to maximum in increments of 500 pounds and simultaneously checked. Therefore the degree of accuracy is at no time in doubt. The unit has been loaded to 50,000 pounds and permitted to remain under stress over night, and not a single pound was lost in pressure.

By using this unique Load Indicator the manufacturers are able to definitely ascertain the cycle of load, the impact load from sudden pick-up, the uneven movement from improperly loaded counter balance and all relative conditions which tend to make the production of oil a costly item due to unnecessary wear and tear that can be checked by the springless hydraulic device.

Tests have been completed with so much satisfaction in California and Mid-Continent fields that the instrument has become recognized by many production men as "the oil well detective". It has been the plan of the manufacturers to make test on wells at the request of oil well producers and these tests have brought to light many interesting phases relative to loads.

A pamphlet has just been issued by Axelson Machine Company describing the device and copies may be procured by addressing the manufacturers at Box 337, Los Angeles, California.



Axelson Load Indicator Installed on Pumping Well

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Always on the job! When a cool drink is needed to refresh the tired workmen in the hot weather. Gott Water Cans are made of galvanized metal in all sizes. Order through your Supply House.
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This always has been the Golden Text in the Ludlow factory. Years and years of experience—since 1866— enables us to build better valves.

If you want your valve investments to pay greater dividends both in satisfaction and economy —TRY LUDLOW DOUBLE GATE VALVES.

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Long Life
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High Economy
Low Maintenance
Mechanically Correct
Moderate First Cost

THE BROWNELL COMPANY
DAYTON, OHIO
Established 1855

New Wyoming Representative for Butler

Casper, Wyo.—The May Tank and Supply Company of Casper, distributors in this territory for Butler tanks and other Butler steel equipment, now is under the management of A. O. Olsen, who will continue to make headquarters here. The company also has a warehouse and office in Salt Creek. Joe L. May, former manager of May Tank and Supply Company, now is associated with the King Time Bomb Company that will have branches in the Mid-Continent and other fields.

Exposition Space Being Sold With Much Success

Tulsa, Okla.—Seventy per cent of the exhibit space sold in seven weeks' time is the mark shown in an official check of the International Petroleum Exposition plat, made June 17. Of the total of 390 booths, 270 have been contracted for, and the per cent of open space sold is approximately the same. Not only has this broken all records, but has exceeded the expectations of President W. G. Skelly and his co-workers.

The executive committee has selected the smaller committees that will work in co-operation with each member of the central body. Following are the names of the committees and their heads, all of whom are on the executive board: Attractions, P. D. Hayes; Conventions, A. W. Leonard; Buildings and Grounds, F. J. Hinderliter; Exhibits, D. D. Wertberger; Scientific and Technical, Alf G. Heggem; Finance, W. M. Bovaird; Public Safety, A. F. Bourne; Transportation, O. C. Staples; Parades and Pageants, Fred W. Insull.

California Stocks Increase

Los Angeles, Calif.—Stocks of all products on the West Coast increased 2,581,956 barrels during the month of May according to figures compiled by the West Coast office of the American Petroleum Institute. Heavy oil including all fuel oil increased 2,156,654 barrels to 63,448,259 barrels, while light oil, 20 gravity and lighter, increased 829,678 barrels to 45,261,831 barrels. Stocks of gasoline decreased 311,888 barrels to 11,363,943 barrels, total. Naphtha distillates stocks decreased 333,875 barrels to total of 6,435,416 barrels.

At end of May, 438 wells were drilling in the state with 468 wells at end of April. Eighty-eight new rigs were put up during May against 139 during April. During May, 11,628 wells were producing against 11,590 in April. Some of these wells have been closed in since May.

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WOOD, AND BOLTED STEEL TANKS

No. 4 of a Series

Our fast - stepping crew at Burbank and a Perfection Vapor Pressure Flow Tank they subsequently erected along with scores of others on the same lease.

Question: Why is it possible for producers to buy lease and moderately-sized storage tanks in all the usually required sizes in such a remarkably short time and have them set up almost in the proverbial "moment's notice"?

Answer: All in all the answer to that question constitutes one of the best reasons why you will find more Perfection tanks in most fields than any other single make and in several, more than all other makes combined.

Simply because we maintain a branch office in every active field in charge or a representative who understands perfectly our ideals as to rendering service. Furthermore he is in charge of ample stocks for all immediate needs.

And last but not least he directs a bunch of our own men who are more interested in getting your tanks set when you want them than they are in the arrival of 5 o'clock.

Black Sivalls & Bryson
INC.

BARTLESVILLE ~ OKLAHOMA

Branch offices in all principal active fields

LETTERS OF Paul Peebles P.S.G.

mi deer cleopatry

well cleo hunny I am not goin 2 make yu no excuses this time about I did not come 2 sea yu on account I gess that is getting pretty old with yu, so I gess yu had better quit lookin for me 2 cum down there & cum up hear 2 sea me. in fack, hunny, it aint no further for yu 2 cum than it is for me 2 go, & I will take yu 2 a pitcher show & out 2 the park & we can danse & have a good time and everything & I wont be there 2 have yore maw makin any remarks about me. yu can tell her that yu are cummin up hear on a shoppin tower & we can run in a stoar & yu can by sumthin whitch will keep that from bein a lie.

well hunny what I was bussy about this time was the oil weakly boys all was in town 2 hav a conferents & wen I went around there 2 sea if it was anny male for me they sed rite away that I should sit in with them, espeshul in the evenins when business was forgot. it seems like hunny that I am the strongest when it aint no bizness 2 attend 2. so I hung around like they ast me, whitch is the reesen I did not hav no time 2 leev town 2 go down 2 sea yu, and by the time it was all over satterdy it was up 2 me 2 spend the next day in bed because I needed sum rest.

I will not giv yu verry mutch of the detales on account of alreddy menshunin who they was I was with, escept that they fed me pretty good & that they all is good cheerful losers whitch accounts for me still bein poplar with them & will not hav 2 werry none about mi chilly munny for a few weeks. also they is a verry entertainin buntch because I set up with a cuple of them all nite long 1 nite without nuthin in the way of lubercashun, whitch is pretty good for me. they is all gone back home now so I gess mabe I will have plenty of time 2 entertane yu if yu will cum up like I sed.

I gess mabe hunny it wood be a good stunt for yu 2 cum up hear on the July 4th when things is kinder lively. I do not no now all the things whitch will be happenin but it ort 2 be sumthin & I gess a hole lot of peepul will be cummin up from goose creek ennyway so that all of our frens from down there can sea us together whitch wood be a pretty good idear on account I gess mabe a hole lot of them has alreddy got 2 thinkin that I hav giv yu up & not havin yu for mi sweety enny moar on account of they do not see me hangin around no moar. it has bin mi experents tho, that if I want peepul 2 sea me on occasions like that it aint none around, but if I am out sumwheres with sumboddy whitch sum of yore frends wood like 2 tell yu about it well everyboddy whitch I noes sees me.

but hunny it is getting time for me 2 begin thinkin about mi bizness sum moar even if it is the time for the yere when evryboddy elst is takin a vakashun. the oil bizness is kinder pekuliar rite now & has got sum of them gessin on account of it is so mutch oil & still it dont seam 2 be enuff & what seems 2 be the cryin need is moar ekonomikal operashuns & also conservatism in the recovery of oil. whitch reminds me that I hav not made no invenshuns along that line in a long time. I aint even made a long stroke pump yet whitch the api cood standardize on so I gess mabe I will hav 2 git bizzy on that because I have got a ideer whitch mabe will work out alrite alreddy fixed up on account of I hav had a varyus experents in mi time & no a hole lot about masheenry. I seen mi old frend trout of lufkin the other day whitch makes me 1 ideer whitch mite be a good 1.

yu see how it cum for me 2 think about it is this. well trout cums from up in the piny woods where he has bin makin saw mill masheenry for a long time befoar me & him either 1 was intrested in the oil feeld bizness. so if they can make saw mills & drillin rigs in the same plase it seems 2 me it aint no reesen why it shoold not be a good ideer 2 use saw mill stuff in the oil bizness when it will werk as good as mi patent will werk. I gess me & trout is about the onliest ones whitch noes about this applycashun. I aint made no blue prints yet, but mabe yu can understand what I meen without no pitcher & it does not make mutch difrents if yu do not understand on account of yu bein a woman, but I will tell yu about it ennyway & dont yu say nuthin about it till I hav had time 2 make mi part out of it & got me a patent on the peebles shot-gun-cable-tool-long-stroke-pump (pat. pending).

The beauty of this patent hunny is that it is in two desines whitch will appeal 2 the rotry cuntry & also the cable tool drillers so that both of them will be satisfied.

it is a simple arrangement like this yu no in saw mills they hav what they call the carredge whitch runs up & down on the track & pushes the log agenst the saw so it will cut. well this is done with a stroke as long as the log & sumtimes longer if it is a short log, so that yu can make a stroke as long as yu want 2, well mi ideer is 2 take this contrapshun out of a saw mill & put it 2 workin on a pumpin rig by just runnin a cable over the crown block & hitchin her on2 the shot-gun whitch they call it in a saw mill. then I betcher yu cood get a long stroke without no wobble if ennyboddy can make a pump long enuff. also it will be power enuff 2 pull the bottom out of the well. then the same thing can be did with cable tools because it is anuther model in the saw mills whitch works on that principle. then if ennyboddy wants a longer stroke than that we can run it with a fordson trackter running up & down a strate rode as far as yu want her 2 go.

now I hav werried yore pretty hed about bizness agin. but I gess yu are intrested in it because as soon as 1 of mi skeems pays off big well then me & yu will get married & live happy every afterwards mabe.

if yu are cummin up for the 4th I wisht yu wood let that onnery slim git a noshun that yu are goin 2 galveston that day so he will go down there in the sted of cummni up hear & hangin around. yu do not need to tell him no lie about it. just talk about me havin sed a cupple times that me & yu cood hav a good time in galveston 2gether, & then if he asts yu where yu are goin tell him that yu will be with me on the 4th & he will gess the rest & gess it rong because he aint got no sents mutch ennyway, & besides mabe if he goes 2 galveston he will get washed.

I gess yu will be glad 2 no that I was so bussy all last week that me & the widder did not git 2 lissen 2 the radyo 2gether nary nite & all the times I was out I did not hav no wimmin in mi car whitch was warm enuff that it was not safe for mi match pocket 2 be next 2 them.

well hunny I git mitty loansome for yu & shure do wisht that yu will be with me on the 4th.

yore lovin paul.

SQUEAKS FROM THE BULL WHEEL

Abe Was Right

Finkelstein was a good customer of Abe and Mawruss, manufacturers of ladies' dresses. He was, however, getting lax about his payment of invoices, and Abe suggested that Mawruss write him a strong but diplomatic letter calling his attention to this laxity.

Mawruss worked for several hours over the letter, then showed it to Abe for his approval. After reading it over carefully, Abe said: "By golly, dot's a wonderful letter. Strong and to der point, aber not personal or insulting. But you got a couple mistakes in it, Mawruss. 'Dirty' you should spell mit only vun 'r' and 'cockroach' begins mit a 'c'."

No Side Show for Him

The handsome young fellow recently settled himself in a certain parlor with his arm around a certain girl, when her little brother came into the room and sat down.

"Here's a dime," said he to the boy. "Get yourself some candy."

"Don't want any candy," retorted the brother.

"Then, here's a quarter; chase yourself."

"Don't want a quarter, either."

"Well, then, here's a dollar; go to a show."

"Don't want to go to the show."

"Well, for cat's sake, what do you want?"

"I want to watch."—The Lever Standard.

"I want a pair of shoes for this little girl," said the mother.

"Yes, ma'am,' answered the shoe clerk, "French kid?"

"Well, I guess not," was the irate answer. "She is my own child, born right here in Des Moines."

First Angel—"How'd you get here?"

Second Angel—"Flu."

"I just bought a new suit with two pair of pants."

"Well, how do you like it?"

"Fine, only it's too hot wearing two pairs."

Nose Knows

An old Scotchman had a peculiar habit of holding his nose whenever he took a glass of whiskey. When asked why he did this, he replied:

"Mon, if I smell it, it mak's ma mouth water, and I dinna want to dilute my drinks wi' onything."

Son: "Pop, did you say God was everywhere?"

Pop: "Yes, son."

Son: "In my room? In this room? In my bed?"

Pop: "Yes, son. Now run on back to bed."

Son: "But, Pop, if God's in bed with me He's biting me."

Absent minded business man kissing wife—

"Now, dear, I will dictate a couple of letters."

She: "Stop."

He: "I won't."

She: (with a sigh of relief)—"All right; I've done my duty."

Magistrate: "Did you or did you not, strike the policeman?"

Prisoner: "The answer is in the infirmary."

Worcester (Mass.) Telegram: Lady wishes position as housekeeper for widower; no objection to having one child.

Mother (telling story): "Once upon a time—"

Little Boy: "Mummy, do fairy-tales always begin like that?"

Mother: "No, darling; sometimes they begin, 'Awfully sorry, my dear, to have been detained at the office again tonight'."

Mary had a little lamb,
Her father shot it dead.
And now it goes to school with her,
Between two chunks of bread.

Two small boys were puzzling their brains to invent a new game. At last one of them said, eagerly: "I know, Billy, let's see who can make the ugliest face."

"Aw, go on!" was the reply. "Look what a start you've got!"

Speaking of Diplomacy

"You certainly have your nerve to charge me seventy-five cents for that piece of meat," said the careful housewife.

"Yes ma'am," replied the polite butcher.

"Would you kindly tell me how it is that I can get the same cut at Wilson's market for fifty cents?"

"I can't say, ma'am. Perhaps Wilson has taken a fancy to you. He is a widower and you are very beautiful. Unfortunately for me, I—yes, seventy-five cents." — Wash. Cougar's Paw.

Two colored gents were conversing when one of them became annoyed by the persistent attention of a large fly.

"Sam, what kind of a fly am dis?"

"Dat am a hoss fly. It am the kind of fly what bazzes 'round cows, hosses and jackasses."

"You ain't making out to call me no jackass, is you?"

"No, I ain't, but you can't fool dem hoss flies."

"Poor dear," asked the solicitous Boston mother of her little girl, "how did you fall out of the kitchen window?"

"Vertically, mother."

Chief: What! You mean to say this fellow choked a woman to death in a well lighted cabaret in front of over a hundred and fifty people? Did no one interfere?

Cop: No, cap, everybody thought they were dancing.

An army surgeon was examining a cow puncher recruit.

"Ever had any accidents?"

"No."

"What's that bandage on your hand?"

"Rattlesnake bite."

"Don't you call that an accident?"

"Naw, the dam' thing did it on purpose."

Teacher—"Johnny, can you tell me where shingles were first used?"

Johnny—"Yes ma'am, but I'd rather not."

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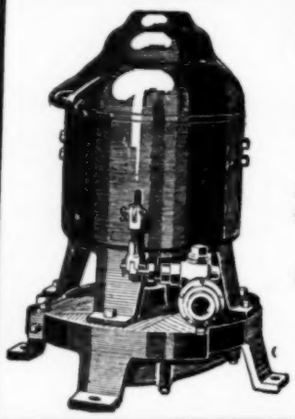

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Western Machinery Co.

Engines, Gas—
Bruce-Macbeth Engine Co.
Climax Engineering Co.
Continental Supply Co.
Frick-Reid Supply Co.
Hope Engineering & Supply Co.
Spence Machine Co.
The Pattin Bros. Co.
Waukesha Motor Company
Western Machinery Co.

Engines (Gasoline or kerosene—
Climax Engineering Co.
Waukesha Motor Company

Engines, Oil—
Continental Supply Co.
Frick-Reid Supply Co.
The Patin Bros. Co.
Western Machinery Co.

Engines, Pumping—
Ajax Iron Works
Bessemer Gas Engine Co.
Bridgeport Machine Co.
Climax Engineering Co.
Continenatl Supply Co.
The Brownell Co.
De La Vergne Machine Co.
Franklin Valveless Engine Co.
Frick-Reid Supply Co.
Hope Engineering Co.
Lucey Mfg. Corp.
Lufkin Foundry & Machine Co.
The National Supply Cos.
National Transit Pump & Machine Co.
Oil Well Supply Co.
Peden Iron & Steel Co.
Republic Supply Co.
Rock Island Plow Co.
Spence Machine Co.
Southern Engine & Pump Co.
Titusville Iron Works
Waukesha Motor Company
Western Machinery Co.

Engineers—
David Donoghue
Foster & Reiter
Hope Engineering & Supply Co.
Lee C. Moore & Co.
Oil Conservation Engineering Co.
D. T. Ring
Westcott and Greis

Fire Protection—
Continental Supply Co.
Oil Conservation Engineering Co.

Fish Tail Bits—
Continental Supply Co.
Frick-Reid Supply Co.
Lucey Manufacturing Corp.
Pelican Well Tool & Supply Co.
Regan Forge & Engineering Co.

Floor Circle Brace—
Continental Supply Co.
Dunn Mfg. Co.

Fuel Oil—
Gulf Refining Co.
Sinclair Refining Co.

Gasoline Extraction Compressors—
Continental Supply Co.
Bessemer Gas Engine Co.
Hope Engineering & Supply Co.
Sullivan Machinery Co.

Gauge Cocks—
The Lunkenheimer Company

Gauges—
Continental Supply Co.
Oil Conservation Engineering Co.
Westcott and Greis

Gas Engines—
S. M. Jones Co.
Waukesha Motor Company

Gas Generators—
Baird Supply Co.

Gas Traps—
American Tank Co.
Continental Supply Co.
Lorraine Corp.
Smith Separator Co.
Trumble Gas Trap Co.

Gasoline and Oil Storage Tanks—
American Tank Co.
Butler Mfg. Co.
Continental Supply Co.
Kansas City Struct. Steel Co.
Parkersburg Rig & Reel Co.
Petroleum Iron Works Co., The

Genuine Wrought Iron Casing—
Reading Iron Co.

Geologists—
Joseph L. Adler
Alexander Deussen
David Donoghue
Edwin B. Hopkins
Foster & Reiter
Heath M. Robinson
Price, W. Armstrong

Governors—
Gardner Governor Co.

Grips and Clamps—
Continental Supply Co.
J. P. Ratigan

Heat Exchangers—
Brown Welding & Machine Co.
Hope Engineering & Supply Co.

Hoists—
Emsco Steel Products Co.

Hose—
Continental Supply Co.
Gustin Bacon Manufacturing Co.

Houses—
Crain Ready-Cut House Co.

Iron Casing—
Superior Tube Company

Laboratory Equipment—
Continental Supply Co.
Fort Worth Laboratories

Lapwelded Steel Boiler Tubes—
The Tyler Tube & Pipe Co.

Lighting Systems—
Bridgeport Machine Co.
Continental Supply Co.
General Electric Company
Westinghouse Elec. & Mfg. Co.

Line Pipe—
Continental Supply Co.
Republic Supply Co.
Reading Iron Co.

Lumber—
Robertson-McDonald Lumber Co.

Lubricators—
Thos Lunkenheimer Company

Manufacturers—
Robinson Packer Co.

Maps—
Heydrick Mapping Co.

Meters—
Continental Supply Co.
Westcott and Greis

Motors—
General Electric Company
Twin City Co.
Westinghouse Elec. & Mfg. Co.

Oiling Devices—
The Lunkenheimer Company

Oil Engines—
McIntosh & Seymour Corp.

Oil Field Equipment—
H. Rickman

Oil Field Supplies—
American Tank Co.
Bridgeport Machine Co.
Butler Mfg. Co.
Continental Supply Co.
The Cunningham Co.
C. C. Fetty
Frick-Reid Supply Co.
Graver Corp.
Erle P. Halliburton
Jarecki Mfg. Company
International Supply Co.
Kansas City Struct. Steel Co.
Lee C. Moore & Co.
Lucey Manufacturing Corp.
The Lunkenheimer Company
The National Supply Cos.
Oil Well Supply Co.
Parkersburg Rig & Reel Co.
Peden Iron & Steel Co.
Pelican Well Tool & Supply Co.
Petroleum Iron Works Co., The
Republic Supply Co.
Regan Forge & Engineering Co.
Robinson Packer Co.
Smith Separator Co.
Southern Brass Mfg. & Plating Co.
Superior Tube Co.
United Iron Works, Inc.
J. H. Williams & Co.

Oil Well Casing—
Continental Supply Co.
Frick-Reid Supply Co.
Republic Supply Co.
Superior Tube Company

Oil Well Cementing—
Erle P. Halliburton

Oil Well Shooting—
Eastern Torpedo Company
U. S. Torpedo Co.
Zero Hour Torpedo Co.

Overshoots—
Baash-Ross Tool Co.
Continental Supply Co.
LeBus Rotary Tool Works

Packers—
Continental Supply Co.
The Guiberson Corp.
Layne & Bowler
Robinson Packer Co.
Pelican Well Tool & Supply Co.
Regan Forge & Engineering Co.

Packing—
Continental Supply Co.
D. P. Connolly Agency
Gustin Bacon Manufacturing Co.
Firck-Reid Supply Co.
The National Supply Cos.
Peden Iron & Steel Co.
Pelican Well Tool & Supply Co.
Republic Supply Co.

Paints—
Continental Supply Co.
Peden Iron & Steel Co.

Panel Boards—
Westinghouse Elec. & Mfg. Co.

Pipe—
A. M. Byers Co.
Continental Supply Co.
Frick-Reid Supply Co.
Harrisburg Pipe & Pipe Bending Co.
International Supply Co.
The National Supply Cos.
Oil Well Supply Co.
Peden Iron & Steel Co.
Reading Iron Co.
Republic Supply Co.
Superior Tube Company

Patents—
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Jack A. Schley
Jesse R. Stone

Pipe Grips—
Continental Supply Co.

Pipe Insulation—
Johns-Manville, Inc.

Pipe Screwing Machines—
Buckeye Traction Ditcher Co.

Pipe Threading Machines—
Jarecki Mfg. Company
Standard Engineering Co.

Pipe Vises—
J. H. Williams & Co.

Pipe Wrenches—
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The Guiberson Corp.
Trimont Mfg. Co.
LeBus Rotary Tool Works
Republic Supply Co.
J. H. Williams & Co.
Wickwire Spencer Steel Corp.

Portable Buildings—
Butler Manufacturing Co.
International Derrick & Equipment Co.

Portable Drilling Rigs—
Bridgeport Machinery Co.
Continental Supply Co.
Lee C. Moore & Co.
Parkersburg Rig & Reel Co.
The National Supply Cos.

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International Derrick & Equipment Co.
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Pulling Machines—
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Continental Supply Co.
Iron King Mfg. Co.

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Continental Supply Co.
D. & B. Pump & Sup. Co.
C. C. Fetty
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Gardner Governor Co.
Gaso Pump & Burner Mfg. Co.
Goulds Manufacturing Co.
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Lucey Manufacturing Corp.
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Northrup Equipment Company
Oil Well Supply Co.
Pelican Well Tool & Supply Co.
Republic Supply Co.
Southern Engine & Pump Co.
Texas Oil Pump Co.
United Iron Works, Inc.

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Sullivan Machinery Co.

Pumping Engines—
McIntosh & Seymour Corp.

Pumping Equipment—
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Pumping Powers—
Continental Supply Co.
C. C. Fetty
Frick-Reid Supply Co.
International Supply Co.
Jarecki Mfg. Company
Jensen Bros. Mfg. Co.
Spence Machine Co.

Regulators—
Westcott and Greis

Refined Products—
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Humble Oil & Refining Co.
Magnolia Petroleum Co.
Sinclair Refining Co.
Texas Co.

Recorders—
Fort Worth Laboratories

Refinery Equipment—
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Petroleum Iron Works Co., The
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Westcott and Greis
Wyatt Metal & Boiler Works

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International Supply Co.
Lee C. Moore & Co.
Oil Well Supply Co
Parkersburg Rig & Reel Co.
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Shaffer Specialty Co.

Sand Reel Supports—
Shaffer Specialty Co.

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Continental Supply Co.
Lorraine Corp.
Smith Separator Co.
Trumble Gas Traps

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Shaffer Specialty Co.

Steel Bull Wheels —
Bradford Rig & Reel Co.
McIntosh & Seymour Corp.

Structural Steel—
Butler Mfg. Co.
United Iron Works, Inc.

Steel Derricks—
Continental Supply Co.
Emsco Steel Products Co.
International Derrick & Equipment Co.
Lee C. Moore & Co., Inc.
Parkersburg Rig & Reel Co.
Superior Tube Company

Steel Crown Blocks—
Continental Supply Co.
International Derrick & Equipment Co.
Lee C. Moore & Co., Inc.
Parkersburg Rig & Reel Co.
Superior Tube Co.

Steel Storage Tanks—
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Butler Mfg. Co.
Continental Supply Co.
Petroleum Iron Works Co., The

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Emsco Steel Products Co.
Howard Smith Company
Layne & Bowler Co.
J. H. McElroy & Co.
Pelican Well Tool & Supply Co.

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H. Rickman

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The Cunningham Co.

Sucker Rod Sockets—
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Brown Welding & Machine Co.
Continental Supply Co.
The Cunningham Co.
Shaffer Specialty Co.
Western Supply Co.

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Continental Supply Co.
Columbus Sucker Rod Co.
D. & B. Pump & Sup. Co.
Dunn Mfg. Co.
Frick-Reid Supply Co.
S. M. Jones Co.
The National Supply Cos.
Oil Well Supply Co.
J. P. Ratigan
Republic Supply Co.

Swabs—
Continental Supply Co.
The Cunningham Co.
Shaffer Specialty Co.

Tank Bolts—
Continental Supply Co.

Tanks—
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Butler Mfg. Co.
Black, Sivalls & Bryson
Continental Supply Co.
The Brownell Co.
Kansas City Struct. Steel Co.
Maloney Tank Co.
Parkersburg Rig & Reel Co.
Petroleum Iron Works Co., The
United Iron Works
Wyatt Metal & Boiler Works

Tank Deadwood—
Robertson-McDonald Lumber Co.

Tank Equipment—
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Johns-Manville, Inc.
Oil Conservation Engineering Co.
Parkersburg Rig & Reel Co.
Westcott and Greis

Tank Insulation—
Johns-Manville, Inc.

Tank Roofs—
Johns-Manville, Inc.

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Continental Supply Co.
Fort Worth Laboratories

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Tongs—
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Continental Supply Co.
Dunn Mfg. Co.
Guiberson Corp.
Howard Smith Company
LeBus Rotary Tool Works
Pelican Well Tool & Supply Co.
J. H. Williams & Co.
Wilson & Willard Mfg. Co.

Tool Joints—
Baash-Ross Tool Co.
Bridgeport Machine Co.
Continental Supply Co.
Emsco Steel Products Co.
Hughes Tool Co.
Pelican Well Tool & Sup. Co.
Regan Forge & Engineering Co.
Republic Supply Co.

Tools (Fishing and Drilling)—
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Bridgeport Machine Co.
Brown Welding & Machine Co.
Continental Supply Co.
Frick-Reid Supply Co.
Houston Engineers, Inc.
Hughes Tool Co.
International Supply Co.
Oil Well Supply Co.
Peden Iron & Steel Co.
Pelican Well Tool & Supply Co.
Regan Forge & Engineering Co.
Republic Supply Co.
Star Drilling Machine Co.
Sullivan Machinery Co.
Western Supply Co.

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Le Bus Rotary Tool Works

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Rock Island Plow Co.
Twin City Co.

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Continental Supply Co.
Lufkin Foundry & Machine Co.
Regan Forge & Engineering Co.

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Continental Supply Co.
Dunn Mfg. Corp.
Guiberson Corp.

Tubing Lines—
Continental Supply Co.

Tubing—
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Republic Supply Co.
Reading Iron Co.

Underreamers—
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Continental Supply Co.
Wilson & Willard Mfg. Co.

Vacuum Pumps—
Continental Supply Co.
Sullivan Machinery Co.

Valves—
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The Charles N. Hough Mfg. Co.
Ludlow Valve Mfg. Co.
The Lunkenheimer Company
Norris Bros.
Northrup Equipment Company
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The Wm. Powell Co.
Smith Separator Co.
Sour Lake Machine Co.
Southren Brass Mfg. & Plating Co.
Texas Oil Pump Co.
Westcott Valve Mfg. Co.

Valves, Gate—
The Lunkenheimer Company

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D. & B. Pump & Supply Co.
Jarecki Mfg. Company
Ludlow Valve Mfg. Co.
Lufkin Foundry & Machine Co.
The Lunkenheimer Co.
The National Supply Cos.
Peden Iron & Steel Co.
The Wm. Powell Co.
Pittsburgh Reinforced Brazing & Machine Co.
Republic Supply Co.
United Iron Works

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International Derrick & Equipment Co.
Lee C. Moore & Co., Inc.

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Continental Supply Co.

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Howard Smith Company
Northrup Engineering Company
Republic Supply Co.
The Charles N. Hough Mfg. Co.
Southern Brass Mfg. & Plating Co.
Texas Oil Pump Co.

Water Gauges—
Continental Supply Co.
J. E. Shaffer Company
Smith Separator Company

Water Cans—
Continental Supply Co.
H. P. Gott Mfg. Co.

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Ward Chemical Company

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American Cable Co.
Bridgeport Machine Co.
Continental Supply Co.
International Supply Co.
Regan Forge & Engineering Co.
Republic Supply Co.
The National Supply Cos.
Wickwire Spencer Steel Corp.
Western Supply Co.

Wire Rope Fittings—
American Cable Co.

Wire Rope Slings—
American Cable Co.

Average a *Mile a Day* for 19 Working Days

DAILY RECORD

July 6th, 3100 feet	19th, 7600 feet
7th, 4900 feet	20th, 7200 feet
8th, Sunday	21st, not working
9th, 2200 feet	22nd, Sunday
10th, 4400 feet	23rd, 1800 feet
11th, 4800 feet	24th, 4400 feet
12th, 4600 feet	25th, not working
13th, 3800 feet	26th, 5000 feet
14th, 8400 feet	27th, 5600 feet
15th, Sunday	28th, 5400 feet
16th, 6600 feet	29th, Sunday
17th, Moved camp	30th, 6000 feet
18th, 7600 feet	31st, 7000 feet

—and it's the AVERAGE performance that tells the tale. The daily records here shown are from a 29 mile pipe line laid with Buckeye Trench Excavators by the Hope Engineering & Supply Co., of Mt. Vernon, Ohio.

You can't beat the combination of a good organization plus good trenching machines.

The Buckeye Traction Ditcher Company, Findlay, Ohio.

Manufacturers of Pipe-Line Trench Excavators and Pipe Screwing Machines

There's a Buckeye Sales and Service Office Near You

Buckeye

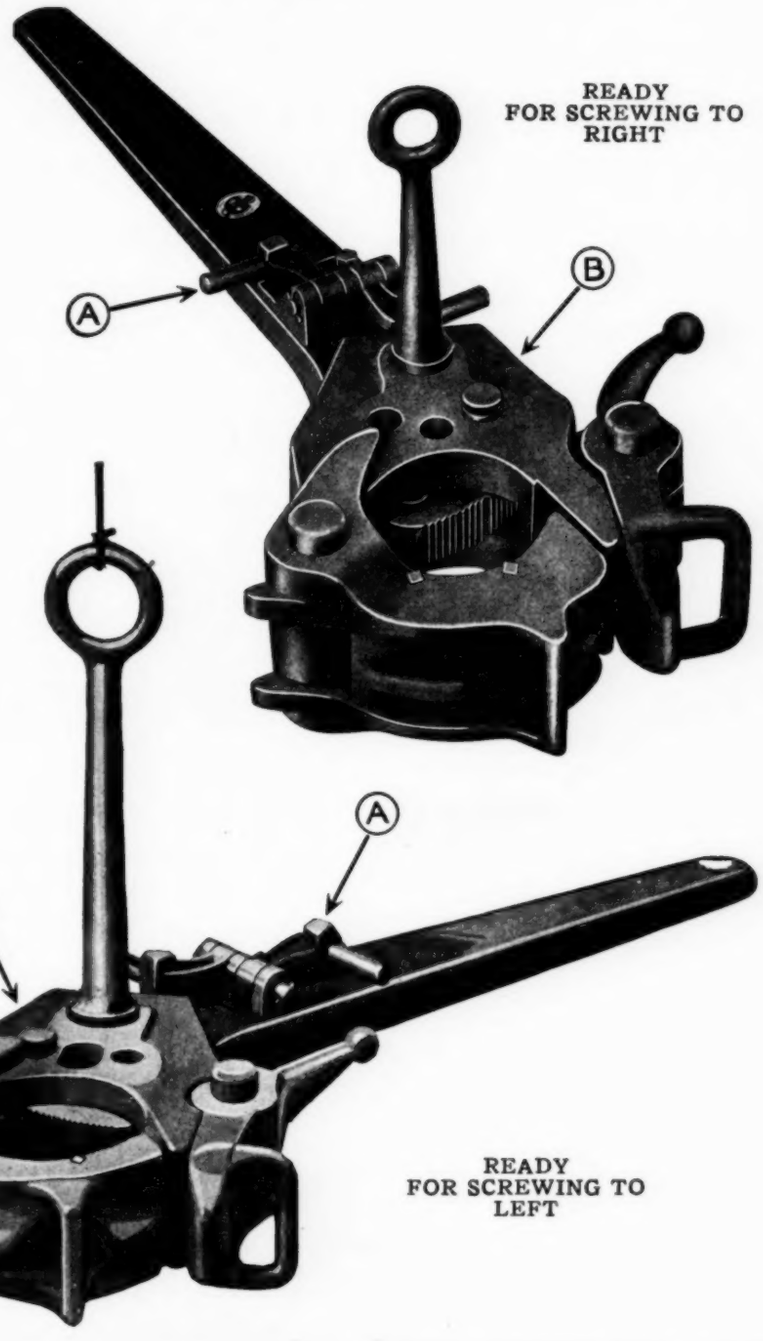
Reversed with 2 Fingers in 2 Seconds.

The instant and easy reversing of Pawls A and Pin B, reverses the tong. Body of tong is not moved.

This is one of several prinary reasons why the GUIBERSON Rotary Tool Joint Tong is gaining ever widening popularity throughout the oil fields of the world.

Fully patented.

"Better Be Safe Than Sorry"



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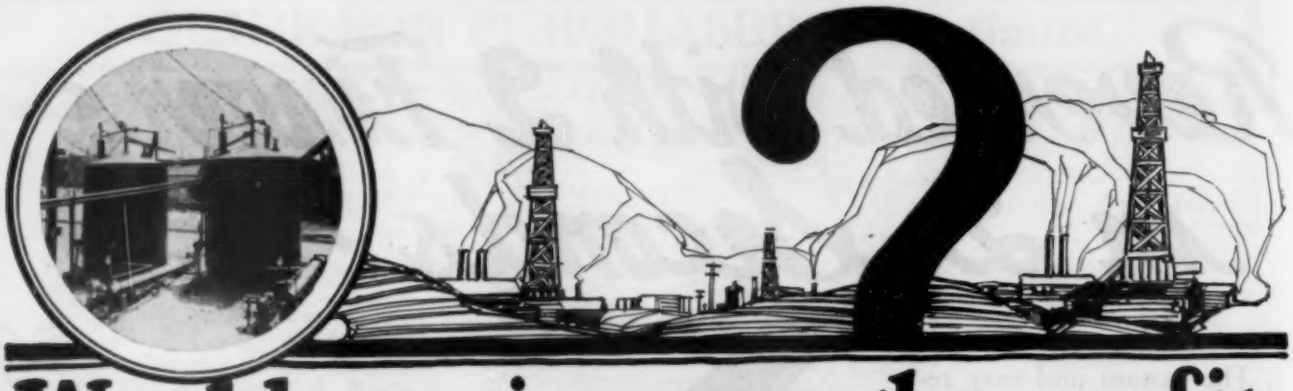
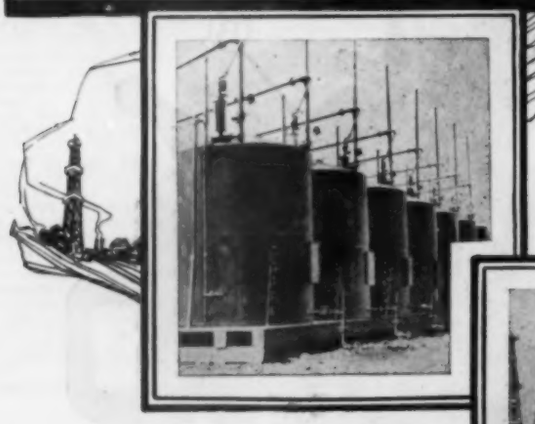
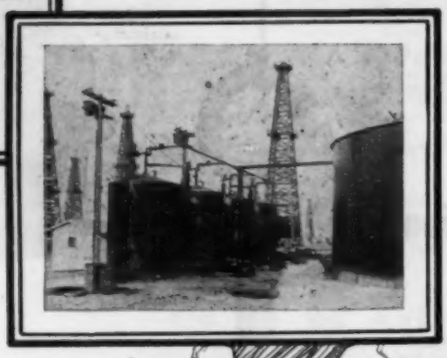


Would you increase the profit from your crude—*if you could?*



"P. R." ELECTRIC DEHYDRATORS



"P. R." Electric Dehydrators are today, in every sizeable field in the country, leading the way to bigger profits by recovering "clean" oil from widely varying emulsions. They recover all the oil from the emulsion at so low a cost per barrel as to make this process indispensable to the producer of "cut" oil.

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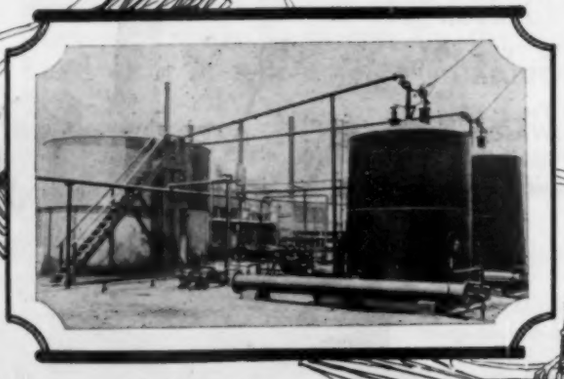

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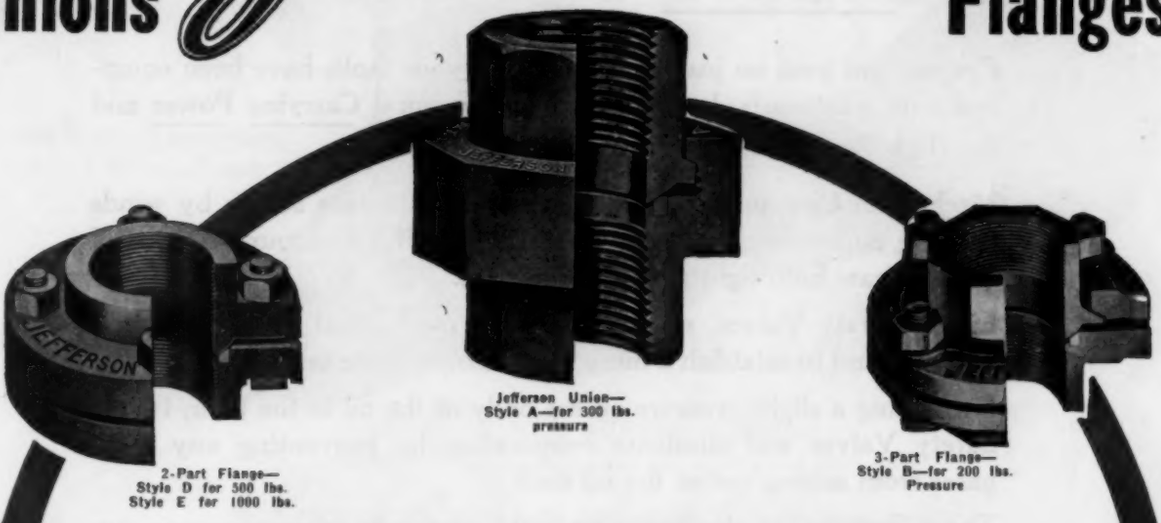
308 Union Oil Bldg., Los Angeles, California
336 Humble Bldg., Houston, Texas

consult Doctor "P. R."

Jefferson

Unions Flanges



Jefferson Union—
Style A—for 300 lbs. pressure

2-Part Flange—
Style D for 500 lbs.
Style E for 1000 lbs.

3-Part Flange—
Style B—for 200 lbs. Pressure

A FAMILY CIRCLE OF "THE FOUR HUNDRED" *in Unions and Flanges*— THE JEFFERSONS!

Union Tee
Style A-13, Union on Run

Union Tee—
Style A-13, Union on Outlet

Brass seat rings located away from runways—patented. Ground ball, brass-to-iron joints. Highest grade, air-refined malleable iron.

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Mechanical Carrying Power on a tank is the action set up by winds crossing an opening from any direction, causing a vacuum which will always draw both light and heavy vapors.

Liquid Safety Valves, not only prevent mechanical carrying power, but also tend to establish a more mean temperature on the tanks.

By holding a slight pressure on the body of the oil in the tank, Liquid Safety Valves will eliminate evaporation by preventing any more gases from arising out of the oil itself.

These features are absolutely essential, especially where recovery systems are in use.

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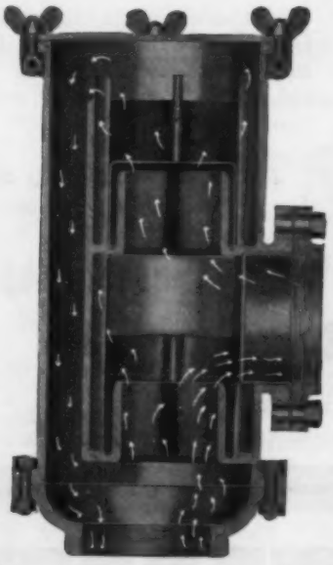
DALLAS TULSA LOS ANGELES
SHREVEPORT FORT WORTH

Liquid Safety Valves are products of safety and conservation engineers who set out to develop a sure method for conserving all gases in tank storage. The success of Liquid Safety Valves in performing this function is attested to by hundreds of users.



Liquid Safety Valves are simple, dependable at all times and are absolutely trouble proof. They are non-sticking, non-corroding and have no seats to grind. They are installed under standard insurance specifications. Minimum insurance rates and maximum service are the results of their design.

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WATERS' GAUGE COCKS

With Non-Corroding
Monel Metal Nozzle

60 new seats for price of one.
Twice the number on any other.

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WELL STRAINER
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To Those Who Believe in Efficiency, this Valve Is Indispensable

If you are among those who are not satisfied with old methods just because they've been in use for a long time, we invite you to try the Roark. Every day this improved standing valve is being specified by an increasing number of men who are looking out for new ways of increasing cost and increasing efficiency.

To this type of men the advantages of the Roark are as plain as a picaninny on a white sheet: greater capacity, less B. S. and cut oil, no cups and leather rings, lower cost whether figured on a basis of barrel of crude or months of service.

We invite those who believe in efficiency to try the Roark, knowing full well what they'll find out.

Texas Oil Pump Co.
WACO, TEXAS

Books for Field Men

Petroleum Production Methods

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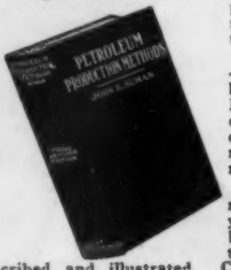

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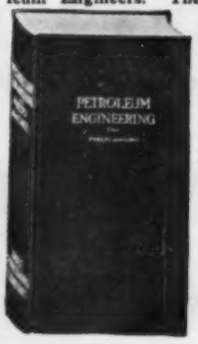

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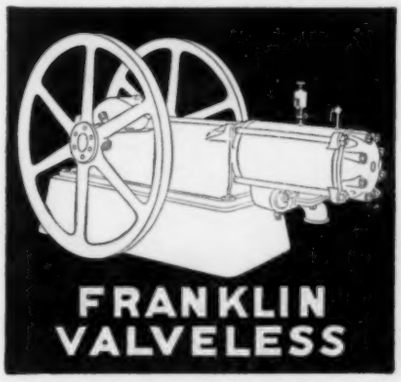

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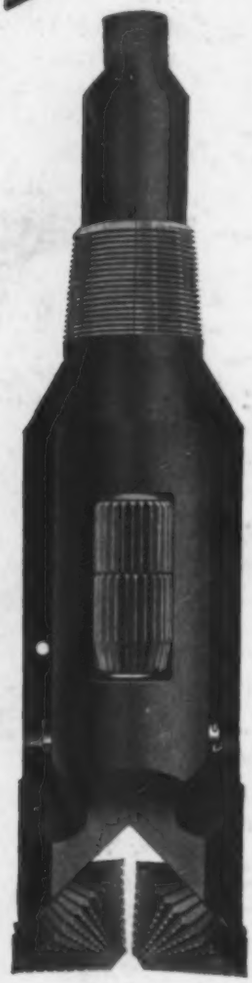

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